This was a relatively easy exam, especially compared to those of recent years. Most of you addressed most of the obvious issues. As a result, most grading distinctions were based on whether your answer reached the less obvious issues, such as whether you recognized the potential for multiple patentable assets in Q1 or recognized how the different trade secret assets in Q2 might raise different protection issues.

Question 1A

Patent

Let’s start by inventorying the potentially patentable inventions. I see a range of options, from incredibly broad to quite narrow:

A: camouflage clothing
B: camouflage clothing that blends into urban settings
C: camouflage clothing with vending machine design
D: mechanism of converting a normal-looking skirt into a camouflage item

A: Camouflage Clothing. Ava has no chance of patenting camouflage clothing, which became increasingly militarily important with the emergence of long-range firearms in the eighteenth or nineteenth century.

B: Urban Camouflage Clothing. I assume that urban camouflage clothing predates the work of Ava’s team by many decades. If that’s not the case, then the idea may have been published when the team posted its design to the Internet. That posting probably started the 12 month statutory bar clock on this broad claim. We don’t know if Ava is still within that 12 month period.

Ava has two more problems with this potential invention. First, at best she could claim joint inventorship. We didn’t discuss the implications of joint inventorship in class, but it may limit her ability to claim exclusivity over the invention.

Second, as we saw with the Lightbulb case, Ava may have a description/enablement problem with the genus urban camouflage clothing because, at the time of posting, she only implemented one species (reversible camouflage sweater). She may not possess the broader invention, nor may it be easy for her to generalize from the sweater to enable PHOSITAs to implement other variations without undue experimentation.

C. Vending Machine Camouflage. Unlike the prior two claims, camouflage using a vending machine design has a higher likelihood of being patentable:
* patentable subject matter? Yes, the design was invented by Ava.

* utility? Although it’s tempting to mock the design’s efficacy, the design will satisfy the utility requirement. As we saw in Juicy Whip, a device that solely pretends to be something else can satisfy the utility requirement.

* novelty? We don’t have any evidence that the prior art contained an identical design. The sweater doesn’t count against the novelty of the skirt claim because it’s not an identical invention.

However, Ava may face a statutory bar problem. Her use of the design in public normally would constitute a public disclosure that starts the 12 month statutory bar for filing in the US. (Public disclosure also would foreclose her international patent rights). The facts don’t specify how long it’s been since she initially wore the design in public.

Nevertheless, Ava can argue that the public disclosures qualified as an experimental use, which would delay the accrual of the statutory bar. This is similar to City of Elizabeth v. Pavement Co. Ava has a pretty good argument that she needed to conduct the test in public. After all, the design’s whole point is to measure its ability to make someone hard-to-see in public spaces, so gauging the response of an unwitting public seems crucial. Unlike Egbert, she also has some evidence that she was still testing the design when she went into the field because she, in fact, iterated the design based on the feedback.

* non-obvious. We don’t have enough information to do a complete Graham analysis, but we do know that the prior art includes the camouflage sweater that Ava’s team had already posted. How much of a leap is it from the sweater to the vending machine skirt? We’d need to establish the baseline knowledge of the applicable PHOSITA to answer this. As an outsider, the idea of camouflaging as a vending machine seems so crazy that I’d be predisposed to assume this wasn’t obvious to a PHOSITA.

* description/enablement. The patent would need to comply with these requirements.

D. Conversion Mechanism

We don’t have a lot of information to assess the patentability of the conversion of a wearable skirt into a pretend vending machine, but this conversion mechanism surely satisfies the patentable subject matter and utility requirements, and it can be properly described/enabled. So we’d have to research the novelty/non-obviousness requirements.

Design Patent. As discussed with trade dress below, I didn’t see a lot about the skirt that was ornamental or non-functional.

Copyright

Skirt Design. As stated in the facts, copyright law doesn’t protect the skirt design.

Skirt Image. The image on the skirt can be copyrightable. Ava first tried a hand-drawn image of a vending machine. That drawing would have qualified for copyright protection.
Ava then switched to a vending machine photo taken by Jerry. Photos of products (“product shots”) are ordinarily copyrightable, though the copyright may be thin, i.e., only protecting against verbatim copying. The fact that the photo was used functionally is immaterial to its copyrightability. Some of you got tripped up on the useful articles doctrine for the photo. The photo has conceptual separability from the skirt because it can exist independently. The skirt is just a new medium of fixation instead of photographic paper. This is analogous to the wallpaper example I gave in class—the wallpaper pattern is conceptually separable from the wallpaper itself.

The facts specify that Ava and Jerry don’t have a written contract, so per copyright’s statute of frauds, we know that Ava did not obtain an assignment or exclusive license of the photo. Therefore, Ava can claim ownership rights in the photo only one of two ways: if Jerry took the photo as her employee, or if she is a joint author with Jerry. Neither argument works.

With respect to the employment relationship, these facts are similar to the CCNV case, where the charity organization gave specifications to the sculptor but otherwise didn’t control his actions. Similarly, Ava gave Jerry precise specifications for the photo, but we don’t have any other evidence that Ava had the “right to control the manner and means by which the product is accomplished.” After all, this was really more of a favor between friends than an employment relationship; and if employment law reaches that deeply into social interactions, we’re doomed.

With respect to joint authorship, the Aalmuhammed factors don’t help a lot here. Jerry took the photo and Ava decided what to do with it, which is similar to Spike Lee’s authority as director. Going back to CCNV, I don’t think we have the same kind of iterative back-and-forth we saw in the sculpting process; nor did Ava make a physical contribution to the final product like the charity’s contribution of the sculpture’s base.

Note that joint authorship probably still would be a loss for Ava, because she would then have a duty of accounting to Jerry, i.e., she’d have to split half of her profits from the photo with him.

At best, I think Ava has a non-exclusive license from Jerry to use the photo. I’ll discuss the implications of that in part 1B.

Trademark

Name. The product’s current name, “Vending Machine Skirt,” is either descriptive or generic. Although the phrases “skirt” and “vending machine” are dictionary words, there isn’t a dictionary entry for “vending machine skirt.” As a result, I think the term is descriptive, not generic, so it would become eligible for trademark protection if it achieves secondary meaning. At the same time, because it’s so descriptive and there may not be a good synonym, the term has a high degree of risk of genericide, so it’s a dangerous term to invest in.

Because Ava hasn’t commercialized the product yet, the name hasn’t achieved secondary meaning.
Trade Dress. I don’t believe any aspect of the skirt qualifies as product “packaging,” although I don’t feel great about that assessment given the classification ambiguities left open by the Samara opinion. Instead, I believe any trade dress claim would be based on product features (or a tertium quid) and therefore wouldn’t qualify as inherently distinctive. Thus, to achieve protection for any trade dress, Ava would have to show secondary meaning, which she can’t do yet because she hasn’t commercialized.

Furthermore, Ava can’t obtain any trade dress protection for functional attributes of the skirt. I struggled to identify any skirt elements that aren’t functional. For example, the color is constrained by the need for camouflage, either to blend into its surroundings or to harmonize with the vending machine photo. The fold-out mechanisms and vending machine design are both clearly necessary for the skirt’s functioning. So I believe that the skirt can’t qualify for trade dress irrespective of secondary meaning because everything about the skirt will qualify as functional.

Question 1B

Copyright

Photo. If Ava doesn’t own the photo of the vending machine, then at most she has a non-exclusive license, but we don’t know what are the terms of that license. As a result, it’s unclear if the license extends to commercializing the skirt.

If Ava exceeds the license scope, Jerry has a good prima facie case of copyright infringement:

- photos generally qualify as copyrightable works, and we’ve already established that he’s the likely owner
- Ava didn’t independently create the photo (in fact, she’d likely stipulate to copying-in-fact)
- Ava reproduced and distributed the photo as part of the skirt.

At that point, Ava’s primary defense would be fair use:

- Nature of the use. Ava’s commercialization would point this factor away from fair use. Ava could argue that the skirt makes a transformative use of the photo because she added something new (the rest of the skirt design) for a different purpose (urban camouflage). Jerry could counter-argue that she didn’t actually add anything to the photo; she just reprinted it verbatim on a skirt.
- Nature of the work. Photos are often subject to thinner copyright protection, especially when, like this one, the photo is designed to be as realistic as possible. This weighs in favor of fair use.
- Amount/substantiality of portion taken. Ava took 100% of the photo. This weighs against fair use.
- Effect on work’s market value. The work is almost certainly lacks value outside Ava’s skirt. No one else is likely to value a realistic photo of a random vending machine. So Ava’s use isn’t likely to diminish the photo’s value. Jerry’s better argument is that there
is a licensing market for freelancer photos, and Ava isn’t paying the traditional license fees. However, Jerry is an amateur photographer, and the parties didn’t agree on any license fee for the implied license Ava got. Therefore, I think Jerry will have a tough time with this factor.

As usual, the fair use analysis is irresolute. As you recall, I counseled against building a business on fair use, and that caution applies in a situation like this. At the same time, the fair use defense isn’t frivolous.

If Jerry wins the copyright infringement claim, what will his damages be? If he registered on a timely basis (unlikely), then he could claim statutory damages of up to $30,000—unless he could show willful infringement, which is unlikely given Ava’s beliefs about the license and fair use. His attorneys’ fees would likely be the bigger financial threat. If Jerry can’t claim statutory damages, then his actual damages could be minimal. He could claim the damages to the photo—which, as discussed in the fair use discussion, might be zero—plus Ava’s actual profits due to the photo. Depending on the proportion of the skirt’s value apportioned to the photo (recall the Sheldon apportionment), this might be a trivial number.

Vending Machine and Component Products. The subject material depicted in the photo might be subject to its own copyright, such as images on the product labels. There are a variety of reasons why these copyrights aren’t likely to be a big deal—not all of which we discussed in class—including fair use, de minimis infringement and possibly 17 USC 113(c).

The overall vending machine design could be evaluated under copyright law as a pictorial/graphical/sculptural work, but it’s highly unlikely that any aspect of that design escapes the useful articles doctrine. I was not impressed if you did a complete copyright analysis of the vending machine design without acknowledging the strong likelihood that the design wasn’t copyrightable. I was also unimpressed if you claimed that the second factor in a fair use analysis—the nature of the work—would tip in favor of the vending machine design owner because the design wasn’t “factual.” There is zero doubt that any vending machine design copyright would be incredibly thin and the second fair use factor would reflect that.

Trademark

The skirt prominently features several Coca-Cola brands. I’m just going to analyze the Coca-Cola name and logo. The other brands depicted in the photo might follow a similar analysis, but their comparative lack of prominence almost certainly makes their case less likely.

Some of you cut a crucial corner by saying Coca-Cola had a trademark, without specifying whether it was the name, logo, trade dress or something else, and then loosely recited a prima facie case without clarifying how the factors applied to the facts of the putative trademark you were analyzing.
**Logo/name infringement.**

I’ll assume the Coca-Cola name and logo are valid trademarks and that Coca-Cola has priority over Ava. I know we discussed in class how “Coke” is often used generically in the South, but we know in practice that courts will give Coca-Cola and its trademarks substantial protection.

It’s less clear that Ava made a trademark use in commerce. Let’s assume she doesn’t actually reference Coca-Cola’s brand in her advertising (for example, she might just say the skirt features a “realistic vending machine design”). Displaying the trademark in the product itself wouldn’t qualify for the more restrictive meaning of “use in commerce” (i.e., in product packaging or ad copy). However, it would satisfy the more expansive definition of use in commerce (regulable under the Commerce Clause).

Assuming the skirt creates a use in commerce, the analysis shifts to likelihood of consumer confusion about the product source.

- multi-factor test. The multi-factor test doesn’t work well in a situation like this. Although Coca-Cola is best known for its drinks, the name and logo appear on a wide range of items, including clothing. Nevertheless, skirt buyers probably aren’t buying the skirt because they think Coca-Cola produced it, nor do they care what brands are depicted on the skirt so long as the camouflage works. In fact, because the skirt is a fairly specialized and niche product that requires some buyer forethought about how it works and how to use it, we’d expect buyers to proceed with some care in making their purchasing decisions. So it seems unlikely that consumers will be confused about the product’s source.

- sponsorship/endorsement. Coca-Cola could argue that consumers will be confused about whether Coca-Cola endorsed or sponsored the skirt. Personally, I’d like to see a consumer survey on this issue. Given the skirt’s premise, do consumers really think that Coca-Cola needed to authorize the depiction?

- post-sale confusion. The skirt’s camouflage is designed to temporarily confuse non-buyers. We could think of this as post-sale confusion. The buyers may not be confused about the brand when they make the purchase, but observers in the field might be. Still, this type of post-sale confusion differs from the more typical luxury brand concerns about knock-offs and counterfeits, where the buyers are misrepresenting the goods’ authenticity to third parties or potentially confusing future buyers who buy the goods in the secondary market. As a result, I don’t expect a post-sale confusion argument to succeed.

In this situation, I see any “initial interest confusion” (whatever that means) among the non-buyers as a subset of the post-sale confusion. It’s possible that skirt buyers would be initially attracted to the skirt because of the Coca-Cola brand elements, but the real risk that non-buyer observers will be temporarily confused when the skirt is deployed.

Even if Coca-Cola could show consumer confusion about product source, Ava could argue nominative use. This could be a difficult argument. There was no other way to refer to Coca-Cola, but she took both the product name and logo, more than necessary to identify Coca-Cola.
Ava could respond that she only took what was necessary to support the camouflage. Also, the nominative use defense could depend on the sponsorship/endorsement question.

Personally, I think Ava should win either on use in commerce grounds or on the lack of consumer confusion about product source.

**Logo/name dilution.** Independent of the infringement analysis, Coca-Cola may have a dilution claim. I think everyone can agree that the Coca-Cola name, and the script logo, are famous marks (i.e., widely recognized by the general consuming public). In fact, their broad recognition is key to the camouflage. Coca-Cola’s marks are distinctive and Ava began use after they achieved fame. As discussed above, the use in commerce analysis is irresolute.

Was there a likelihood of dilution? I don’t see the blurring argument. Even if Ava’s use isn’t nominative, she isn’t creating a new definition to Coca-Cola or the logo; she’s using the marks exactly as they are found in the field. I also don’t see a tarnishment argument. I don’t see how consumers would think less of Coca-Cola because it’s used on the skirt. Perhaps Coca-Cola’s best argument would be if the skirt were made of shoddy material or caused personal injury (recall Louis Vuitton made similar arguments in the Chewy Vuiton case), but I still don’t see why consumers would attribute those defects to Coca-Cola.

Ava could also try a nominative use defense (same analysis as above) or argue that it’s a non-commercial use as a defense (whatever that means).

I think the odds of a successful dilution claim are low.

**Vending machine trade dress.** The vending machine may have its own trade dress independent of the Coca-Cola name and logo. At minimum, it has the strong red color associated with Coke. The skirt replicates this trade dress; and it does so to deliberately (albeit temporarily) confuse individuals in public about its function as a vending machine. Arguably, this is akin to counterfeiting. Still, the consumers buying the skirts aren’t confused, so this temporary confusion in public (is it a vending machine or not?) is, at most, a variation of the post-sale confusion discussion above.

**Question 1C**

My top three suggestions:

1) Change the skirt’s brand name. “Vending machine skirt” is a terrible brand name. It’s descriptive, so Ava can’t protect the name initially. The name has a high risk of genericide. Like the Murphy Bed, there’s not a good synonym to describe the skirt. Thus, consumers are likely to use the brand name as the generic name for the skirt. To ensure she has the long-run ability to protect her brand name, and require competitors to use some other name, Ava should pick an inherently distinctive name for her offering and then use it as an adjective to modify the noun “skirt.” This way, consumers will still have an available descriptor for the skirt (i.e., vending machine skirt) that’s separate from her brand name.
2) Secure copyright rights to the photo/image. As we discussed in class, photos are liability traps, and fair use is precarious in a commercial setting. As a result, Ava should not go to market without adequate copyright permissions for the graphic displayed on the skirt. She could strike a deal with Jerry. Or, she could get a new photograph from someone who grants a written assignment or exclusive license to the photo. (It’s doubtful a photo can qualify as a specially commissioned work for hire). Or, she could retain a graphic artist to do a photo-realistic drawing, again subject to a written assignment or exclusive license.

Once Ava has the proper copyright interests in the image, she probably ought to register the copyright. The odds that a competitor would use her image, rather than create a new one, seems pretty low, but the costs to registration are low and the possibility of statutory damages/attorneys fees justify the low costs.

3) Obtain brand licenses or use fake brands. I don’t think the trademark risks to Coca-Cola or others are particularly high. Still, Ava could eliminate the risk of crippling defense costs by obtaining licenses. If licenses aren’t cost-effective, then Ava should consider depicting fake brands rather than real ones, either by having a graphic designer draw fake brands photo-realistically, or by photoshopping a photo to change the real brands into fake brands (the photoshopping works only if all of the potential trademarkable elements are changed). The legal benefit of using fake brands has to be balanced against the degraded camouflage effect caused from the lack of authenticity. I’m assuming a well-drawn photo-realistic image using fake brands would perform nearly as well as a temporary diversion, though it would need to be field-tested.

**Question 2**

I’ll discuss four classes of potential trade secret information, and then I’ll make a final observation about the characterization of Under Armour’s information as “trade” secrets.

**Trade Secret #1: Suit design.** The suit is designed to reduce aerodynamics, manage body heat and support muscle functions.

*How? Will It Work?* The design will be codified in various sketches, which can be restricted in distribution and subject to NDAs.

The actual suit design is disclosed to everyone seeing the suit. This includes:

- Suit manufacturers if Under Armour subcontracts the manufacturing. Any third party manufacturers can be locked up by NDAs. Per Metallurgical Industries, it’s possible they would be restricted by implied confidentiality obligations even without an NDA.
- Lockheed Martin when they test the suits. Lockheed Martin can be locked up by an NDA.
- U.S. Speedskating. The facts aren’t clear if U.S. Speedskating actually sees the designs before the public does. Given their involvement representing the individual speedskaters, it seems likely U.S. Speedskating is integrally involved in each step in the design process. In theory, U.S. Speedskating could be locked up by an NDA, but we’d need to research if they are a government function and thus subject to public disclosure laws like FOIA. If
they are, then Under Armour’s disclosure to the government agency would destroy trade secret protection. (FWIW, my quick review suggests they are an NGO, but I’d have to look more closely).

- Skaters and people observing the skaters. By the time skaters wear the new suits at the Olympics, the design will be publicly disclosed and not a trade secret. However, the design will fall out of trade secret protection well before then. The design could fall out of trade secret protection as soon as Under Armour delivers the suits to skaters if any skaters aren’t governed by non-disclosure obligations. But even if Under Armour locked up every skater-recipient with an NDA, the suit design would soon fall out of trade secret protection because it’s unrealistic to expect the skaters not to disclose the design to unrestricted third parties, e.g., family and friends, coaches, and any random person at the skating rink at the time the suit is being tested or used.

In theory, the skaters could be obligated to avoid disclosing the suits to any third parties, such as requiring them to keep the suit in a box when not in use and ensure the skating rink is closed to all outsiders when the suit is being tested. That seems highly unrealistic, so we can assume the design will drop out of trade secret protection upon shipment to the skaters or almost immediately thereafter. This is almost certainly why Under Armour delayed shipping the final version to skaters until right before the Olympics.

Some of you made some highly impractical suggestions that Under Armour should require all skaters to practice in a single facility where Under Armour controlled all access to the facility and kept out anyone who didn’t sign an NDA. I imagine most skaters want to train in their hometowns or with their coaches, and they probably need the benefit of their social support network. So asking skaters to centralize for the duration of testing seems unrealistic.

Trade Secret #2: Suit fabric composition. In addition to the suit’s design, the suit’s aerodynamic efficiency and other functions will depend in part on the suit’s fabric, i.e., the composition of materials.

*How? Will It Work?* A person who merely observes the suit in the field, or sees photographs, will be unlikely to figure out the fabric composition. However, anyone who has the physical item in their possession may be able to deduce the composition by inspection, or more likely, by reverse engineering.

Thus, Under Armour can protect this secret by controlling who has physical access to the suits. So long as the suits remain within the universe of people who have signed NDAs, in theory the suits can remain a trade secret at least until the time Under Armour tries to sell them commercially. However, this seems unrealistic. With each skater getting three suits, it seems likely that some suits will fall into the hands of people who haven’t signed an NDA.

Still, once the suit gets into the hands of an unrestricted recipient, that doesn’t immediately mean the composition trade secret is lost—just like the recipe for Coca-Cola’s formula isn’t lost just because people can drink Coca-Cola. We’d need to know more about whether inspection of the suit would make the composition apparent, or if it would be hard or impossible to reverse engineer the suit’s composition. If the composition isn’t apparent and it is hard to reverse-
engineer the composition, the composition trade secret can survive the suit’s distribution. As we know, no one has been able to reverse engineer the Coca-Cola formula after more than a century.

**Trade Secret #3: Performance Data.** Under Armour might have trade secret protection in the suit’s performance data generated by Lockheed Martin’s testing. This information could help competitors by helping them anticipate how well the suit will perform in the field, giving them performance benchmarks to try to beat. This is the kind of moves/competitor countermoves we discussed with the Redmond case. Even if competitors don’t know how Under Armour does it, competitors would know what their suits have to do to beat Under Armour’s.

*How? Will It Work?* The facts we have indicate that the performance data is only shared among Under Armour and Lockheed Martin. If so, it’s simple to restrict Lockheed Martin by NDA and then maintain the security of the data.

**Trade Secret #4: Manufacturing Process.** Under Armour may have developed new or unique methods of manufacturing the suits. If Under Armour doesn’t contract out manufacturing, then it would be easy for it to restrict access to its manufacturing facilities to those who have signed NDAs. If Under Armour does contract out manufacturing, then we need to avoid the issues from the Rockwell case. Each subcontractor needs to sign an NDA, and preferably Under Armour would require them to take additional specific steps to ensure the confidentiality of the manufacturing trade secret.

Final Observation. It’s unclear if Under Armour actually faces competition for speedskating suits. U.S. Speedskating may sole-source its procurement, and it’s not clear if Olympic-class suits otherwise have a commercial market. If Under Armour doesn’t face actual competition for these speedskating suit designs, then the real point of secrecy is simply about beating rival nations’ teams, not preserving Under Armour’s commercial advantages.