Brian's U1 Self-Check Feedback

- ☑ 1.3.1.8: The question asks "Which of the following are examples of algorithms?" but the format is radio buttons, not checkboxes. Either the text of the question should be singular or the student should be able to choose more than one but fewer than all the algorithms. As it is, any student who's taken an exam before can answer it just by quizmanship.
- ☑ 1.3.3.4: In the "bad commenting" script pic, the comment on the TURN block isn't attached to it. In the "good commenting" one, the comment on the prototype (hat) block isn't attached to it. Also, the last word in the comment in the script pic is "squares" but the last word in the help screen is (correctly) "square."
- ☑ 1.3.3.6: Get rid of "compare and contrast." For one thing, we've bent over backward not to have BJC have the tone of a typical textbook; for another, "compare and contrast" doesn't make sense even on its own terms in the context of a multiple choice question. I'd suggest "Consider these two scripts:" And then below the pictures "Check all that are true." Also, the four responses are written from the perspective that an attached comment isn't part of the script, which isn't how we think of it. (Consider that when you move the script, the comments come with it.) So the response to "In one script, the pen color will be green" should be "Adding a comment will not change the behavior of the script" (without the italics); the option "Both scripts are exactly the same" should be "both scripts have the same behavior."
- ☑ 1.3.4.4: I know this has been this way from the very beginning, but when I read
 the question just now I took it to mean that the procedure should accept positive
 backups (so, actually moving forward instead of backward) as well as negative
 ones. I think it'd be clearer to say "accept a positive input value instead of a
 negative one to specify the backup amount."
- Orange box before 1.3.5.4: Probably this has also been here since the beginning of time, but I now find it confusing, because the writing of a PINWHEEL procedure that includes the cases of polygons and asterisks actually happened on the previous page, 1.3.4. What happens on this page is the opposite of that: making a more specific procedure to capture an important special case of the generalization. I know we've had feedback that people

couldn't understand the pedagogic purpose of introducing asterisks and pinwheels; the original plan was not to show how polygons are a special case of pinwheels until the last minute, but we were never consistent about doing it that way. I'm not sure how to fix this; one idea would be to move the box back a page, or another idea would be to reword it so that instead of talking about "abstraction by generalization" it would say something along the lines of "another potential benefit of abstraction is that the abstract procedures can be specialized for particular cases of interest."

☑ 1.3.6.11: The response to the choice of the non-closed picture is given as "The pattern is not repeated the correct number of times" but that's not right for this picture. (The same response is given correctly for another of the pictures.)

What's wrong with this picture is that it doesn't show nested polygons at all!

What it shows is a variant on a squiral, in which, instead of drawing four equal-length sides and then jumping up to a larger side length for the next square, this picture is made by changing the side length within a single square, in a nonuniform way. (Try writing the code to draw that picture!)

```
for i = 1 to 3

repeat 3

move i × 20  steps

turn 90 degrees
```

- ☑ Text after 1.4.1.3 typo: "many these companies" should be "many of these companies."
- ☑ 1.4.3.3: This is kind of a silly question. The fact that it says "privacy" in big letters at the top of the page kinda gives it away. None of the other answers is even remotely plausible. If this is the best we can do, not every page needs to have multiple guess questions on it.
- ☑ 1.4.4.10: The response to the physical health option is only partly correct. Web sites don't directly measure your physical health the way a Fitbit does, but if you do a web search for AIDS medications, they may plausibly infer that you, or someone in your household, is HIV-positive.
- ☑ 1.5.2.6: The script pic on the English page has a Spanish sprite name. (But the alt text has the English name.) And is it intentional that the Boolean input to the IF is empty?

"describes" about a numeric answer. How about "How many times will the sprite move?" Also, the responses to the wrong answers could be more helpful. In response to "1 time" it should say "The code says '<', not '>'." I think the response to "0 times" should be "REPEAT UNTIL repeats until the condition is true, not until it's false." Also, in the response to (the correct) "Forever," the hyphen in "x-position" should be a space, to be consistent with the actual code and with the other responses. But you can hyphenate "10-step" instead. :)

☑ 1.5.2.10: Typo in the question at the top: missing "how" in "[how] many times."
And this time, all four responses have "x-position" instead of "x position." I think
the response to "1 time" would be more helpful if it said "REPEAT UNTIL tests
its condition before running the enclosed script."