Chapter 5 BLM Answers

BLM 5–2 Chapter 5 Warm-Up
Section 5.1
1. octagon
2.
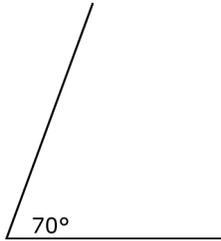
3. 10.2
4. 12.5
5. 54 cm^2

Section 5.2
1. 120°
2. 540°
3. Yes
4. No
5. Yes

Section 5.3
1. ED = 7 units, BD = 14 units,
CD = 9 units, EC = 4 units
2. FG = 6 units, ∠FIG = 58°,
∠EIF + ∠FIG + ∠GIH + ∠HIE = 360°
3. False
4. True
5.
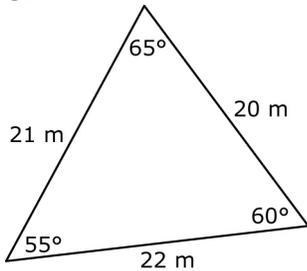
BLM 5–7 Section 5.1 Extra Practice
1. 120°
2. 108°
3. a) 40°, 40°, 100°
b) A and C
c) A: acute, B: obtuse, C: acute
d) two acute, one obtuse
e) No. They can also have three acute angles.
4. Yes
5. a) 180° **b)** 1080° **c)** 360°
6. all of them

7.

Polygon	Number of Interior Angles	Sum of Interior Angles	Measure of Each Interior Angle
Scalene triangle	3	180°	varies
Parallelogram	4	360°	2 equal acute angles, 2 equal obtuse angles
Isosceles trapezoid	4	360°	2 equal acute angles, 2 equal obtuse angles
Regular hexagon	6	720°	120°
Regular octagon	8	1080°	135°

8. Yes; 7.2 ÷ 6 = 1.2, and 1 < 1.2
9. a) 5 **b)** 108°
10. All of the triangles tessellate.
11. A and B
12. Example:
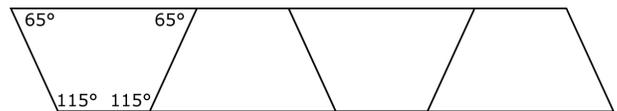
13. Example:
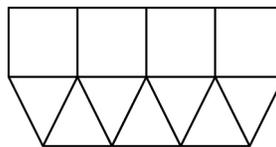
14. Example:

BLM 5–8 Section 5.2 Extra Practice
1. a) AC = 13 cm, BC = 5 cm, CD = 12 cm
b) PQ = 7.1 units, PR = 10 units,
∠PQR = 90°, ∠PSR = 180°
c) UV = 5 units, ∠WXV = 110°,
∠TXU + ∠UXV + ∠VXW + ∠WXT = 360°
d) IG = 4 units, EG = 8 units, GH = 6 units,
IH = 3 units
**2. a)** True **b)** False **c)** True **d)** False

**3.** No. It is not a rectangle because the diagonals are not equal.
**4.** B
5. C
6. #4A

6   8
12

#4C

5   12
13

#5A

57°
7
5
78°   45°
6

#5B

8   6
37°   53°
10

7. Example:
a)

40°
8   6
60°   80°
10

b)

40°
10   8
60°   80°
6
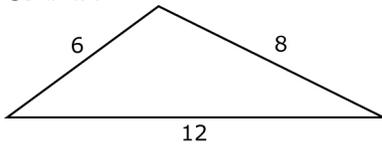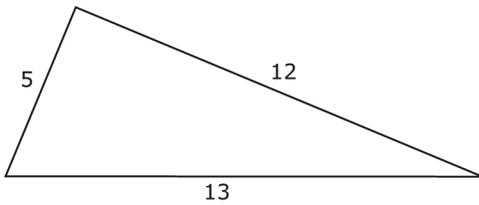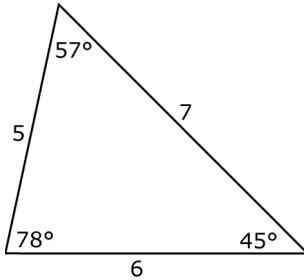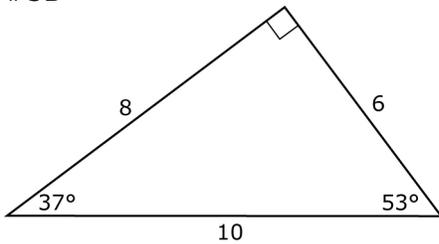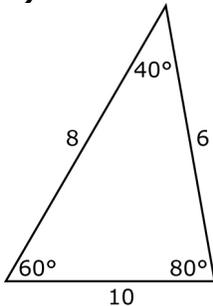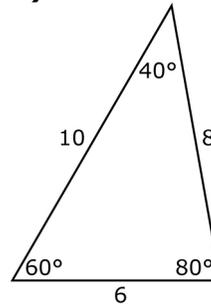
BLM 5−9 Section 5.3 Extra Practice
1. a) square
b) rectangle
c) square
d) isosceles trapezoid
2. a)
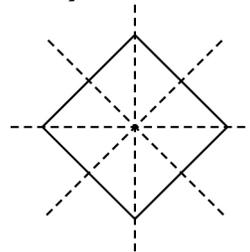
b)
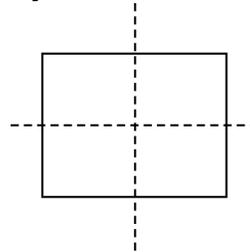
**c)**
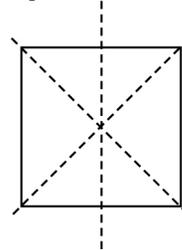
d)
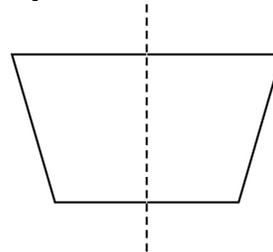
3. a)
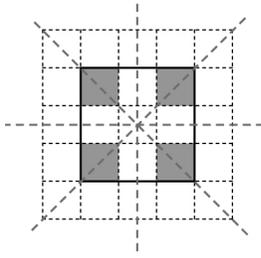
**b)** Example:
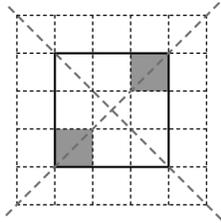
c) Example:
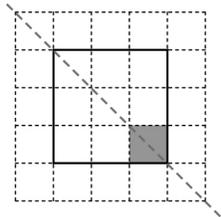
d) Example:
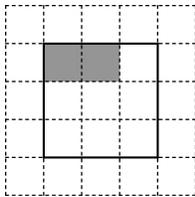
4. Answers may vary. Look for students to draw the lines of symmetry and report how many there are for each logo.

**5. a)** equilateral triangle

b) hexagon

c) octagon

6. a)
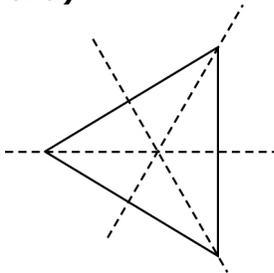
b)
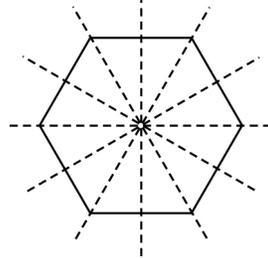
c)
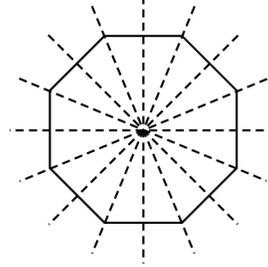
7. a)
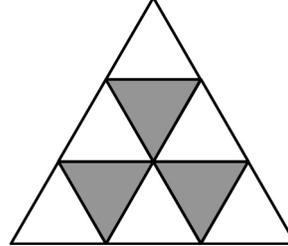
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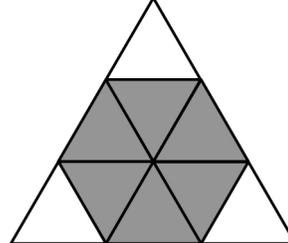
c)
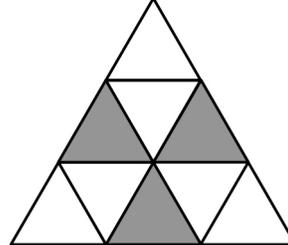
**8.** Answers may vary. Check that students identify the specified number of lines of symmetry for parts a) to c).

BLM 5–10 Chapter 5 Test

1. C
2. D
3. C
4. B
5. B
6. Determine the sum of the interior angles where the vertices meet. If the sum of the angles is exactly 360°, the polygon can be tessellated.
7. Answers will vary. Look for polygons that are featured in the chapter and look for students' justification of why their pattern tessellates, i.e., it tiles the plane. Check that students name the three polygons they use.
**8.** Example: It is called isosceles because two sides are equal.
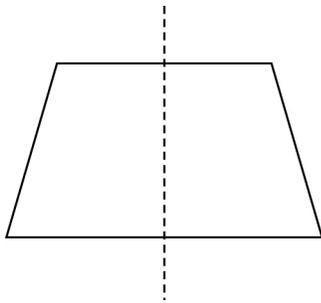
9. a)
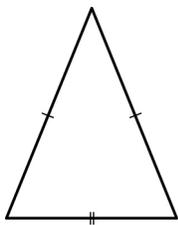
b)
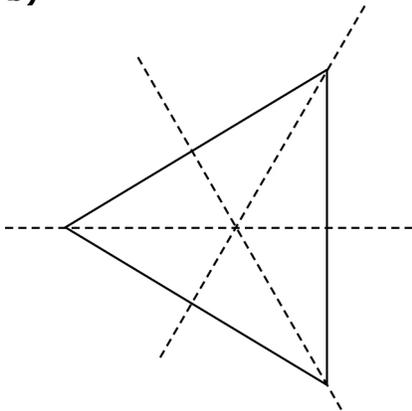
c)
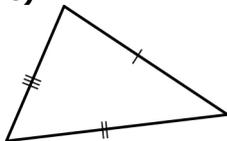
d)
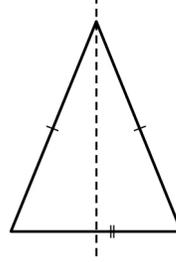
10. a) ML = 5 units, KM = 7 units, NL = 3.5 units, ∠JNK = 90°
b) BC = 8 units, ∠AEB = 100°, ∠BEC = 80°, ∠CED = 100°
11. a) right triangle
b) one line of symmetry
c) equilateral triangle
12. She needs to switch the labels for the 8-cm and the 10-cm sides.