

Name _____

PROBLEM SOLVING Lesson 10.7

Problem Solving • Shape Patterns

COMMON CORE STANDARD CC.4.OA.5

Generate and analyze patterns.

Solve each problem.

1. Marta is using this pattern to decorate a picture frame.
Describe the pattern. Draw what might be the next three figures in the pattern.



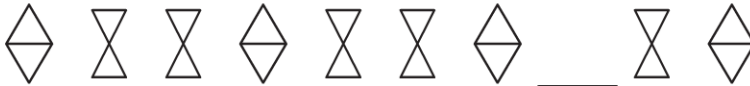
Possible answer: the pattern repeats: _____

one triangle followed by two squares. _____

2. Describe the pattern. Draw what might be the next three figures in the pattern. How many circles are in the sixth figure in the pattern?

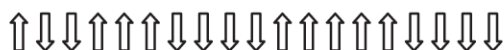


3. Larry stencils this pattern to make a border at the top of his bedroom walls. Describe the pattern. Draw what might be the missing figure in the pattern.



Lesson Check (CC.4.OA.5)

1. What might be the next three figures in this pattern?



- (A) ↓↓↑ (C) ↑↓↓
- (B) ↓↑↑ (D) ↓↓↓

2. Which might be the missing figure in the following pattern?



- (A) (C)
- (B) (D)

Spiral Review (CC.4.OA.4, CC.4.NF.3d, CC.4.NF.4a, CC.4.NF.7)

3. Chad has two pieces of wood. One piece is $\frac{7}{12}$ foot long. The second piece is $\frac{5}{12}$ foot longer than the first piece. How long is the second piece? (Lesson 7.5)

- (A) $\frac{2}{12}$ foot
- (B) $\frac{1}{2}$ foot
- (C) $\frac{12}{18}$ foot
- (D) 1 foot

4. Olivia finished a race in 40.64 seconds. Patty finished the race in 40.39 seconds. Miguel finished the race in 41.44 seconds. Chad finished the race in 40.46 seconds. Who finished the race in the least time? (Lesson 9.7)

- (A) Olivia
- (B) Patty
- (C) Miguel
- (D) Chad

5. Justin bought 6 ribbons for an art project. Each ribbon is $\frac{1}{4}$ yard long. How many yards of ribbon did Justin buy? (Lesson 8.1)

- (A) $\frac{2}{3}$ yard
- (B) $1\frac{1}{4}$ yards
- (C) $1\frac{1}{2}$ yards
- (D) $1\frac{3}{4}$ yards

6. Kyle and Andrea were asked to make a list of prime numbers.

Kyle: 1, 3, 7, 19, 23

Andrea: 2, 3, 5, 7, 11

Whose list is correct? (Lesson 5.5)

- (A) Only Kyle's list
- (B) Only Andrea's list
- (C) Both lists are correct.
- (D) Neither list is correct.