

Name: \_\_\_\_\_ Date: \_\_\_\_\_

## EVERYDAY MATHEMATICS—3<sup>rd</sup> Grade

### Unit 2 Review: Number Stories and Arrays

<b>UNIT</b>

Fill in the unit box and the blanks.

1)  $4 + \underline{\hspace{2cm}} = 12$

$40 + \underline{\hspace{2cm}} = 120$

$400 + \underline{\hspace{2cm}} = 1200$

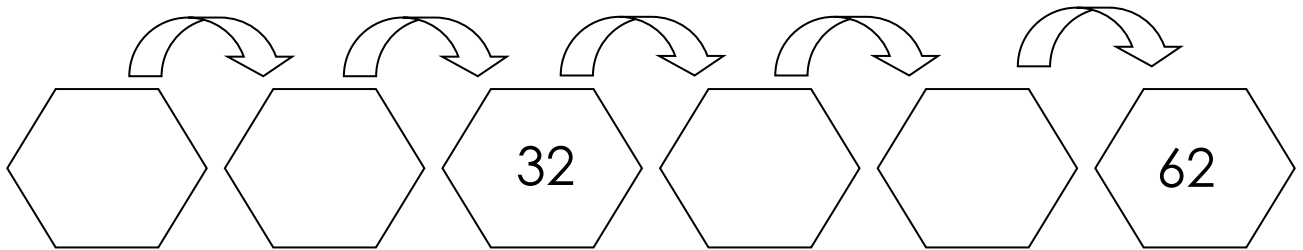

2)  $16 - 9 = \underline{\hspace{2cm}}$

$26 - 9 = \underline{\hspace{2cm}}$

$76 - 9 = \underline{\hspace{2cm}}$

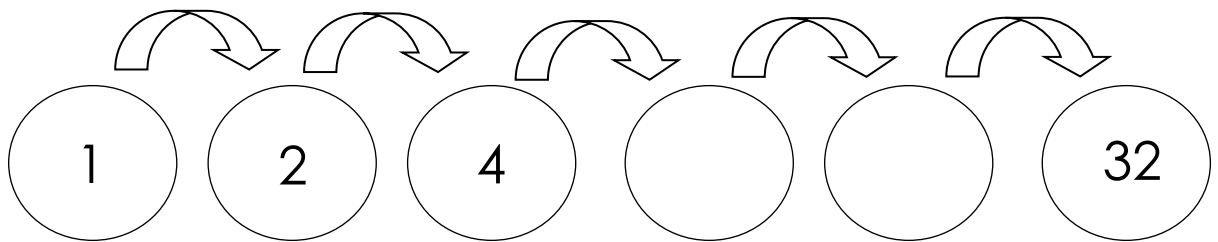
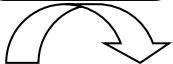
3)

Rule
$+ 10$



4)

Rule

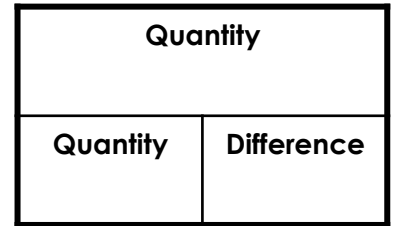
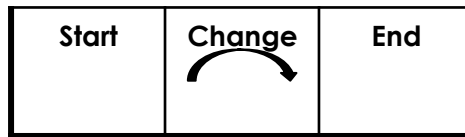
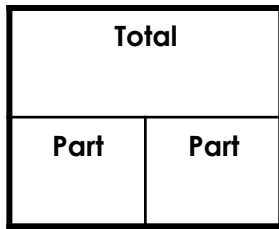


## Unit 2 Review (continued)

For each number story, write a number model with a ?.

Then solve the number story.

You may draw diagrams, like those below, or pictures to help.



- 5) Madison ran for a total of 48 minutes on Monday and Tuesday. She ran for 30 minutes on Monday. How many minutes did she run on Tuesday?

\_\_\_\_\_

(number model with a ?)

Answer: \_\_\_\_\_

(unit)

How do you know your answer makes sense?

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- 6) One Mississippi alligator clutch has 41 eggs. Another Mississippi alligator clutch has 29 eggs. How many more eggs are in the first clutch?

\_\_\_\_\_

(number model with a ?)

Answer: \_\_\_\_\_

(unit)

How do you know your answer makes sense?

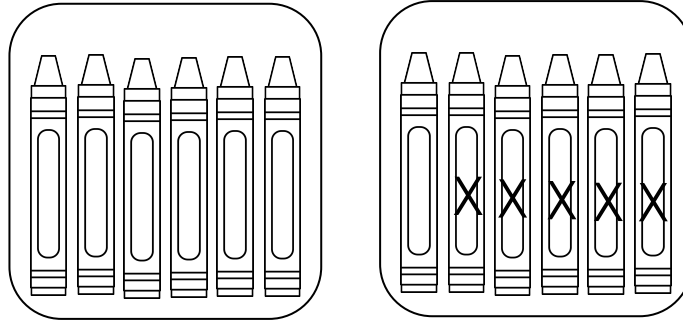
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## Unit 2 Review (continued)

- 7) Camden read the number story below. Then he drew a picture and wrote two number models to keep track of his thinking.

Mrs. Wilson has 2 packs of crayons with 6 crayons in each pack.  
She gives 5 of the crayons to her students.  
How many crayons does she still have?



$$2 \times 6 = 12$$

$$12 - 5 = 7$$

Do Camden's number models fit the number story? Explain your answer.

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- 8) There are 6 hot dog buns in a pack.  
a. How many hot dog buns are in 6 packs?  
You may draw a picture to help you solve.  
Circle the number model that fits the story.

$6 + 6 = ?$

$6 \times 6 = ?$

Answer: \_\_\_\_\_  
(unit)

- b. Explain how you solved Problem 8a.

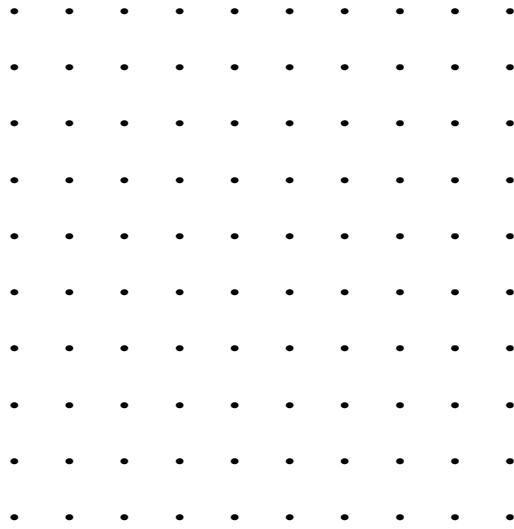
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## Unit 2 Review (continued)

9) You have 3 rows of chairs with 6 chairs in each row.  
How many chairs do you have in all?

a. Draw an array on the dot grid to match the story.



b. Circle the number model that fits the story.

$3 \times 6 = ?$

$3 + 6 = ?$

There are \_\_\_\_\_ in all.  
(unit)

10) Share 15 marbles equally among 3 friends.  
Draw a picture to show how you shared the marbles.

Each friend gets \_\_\_\_\_.  
(unit)

There are \_\_\_\_\_ left over.  
(unit)

Name: \_\_\_\_\_ Date: \_\_\_\_\_

## EVERYDAY MATHEMATICS—3<sup>rd</sup> Grade

### Unit 2 Challenge Review

1) Hudson says that knowing  $4 + 6 = 10$  helps him solve this problem on his calculator.

Enter 334. Change it to 370. How? \_\_\_\_\_

Explain how Hudson might use the basic fact.

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2) Read the number story and circle the pair of number models that fit the story. Then solve.

Mr. Hernandez equally shared 24 crayons among 4 groups. Sal's group found 6 more crayons. How many crayons does Sal's group have now? You may draw a picture to help.

Circle the pairs of number models that best fit the story.

**A**  $24 \div 4 = 6$

$6 + 6 = 12$

**B**  $24 + 4 = 28$

$28 + 6 = 34$

**C**  $24 \times 4 = 96$

$96 + 6 = 102$

**D**  $24 - 4 = 20$

$20 + 6 = 26$

Sal's group now has \_\_\_\_\_ crayons.

## Unit 2 Challenge Review (continued)

3) You have 16 chairs that you want to arrange in an array.

a. Show 3 different ways you could do this on a dot grid at the right. Write number models for each array.

Number models:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

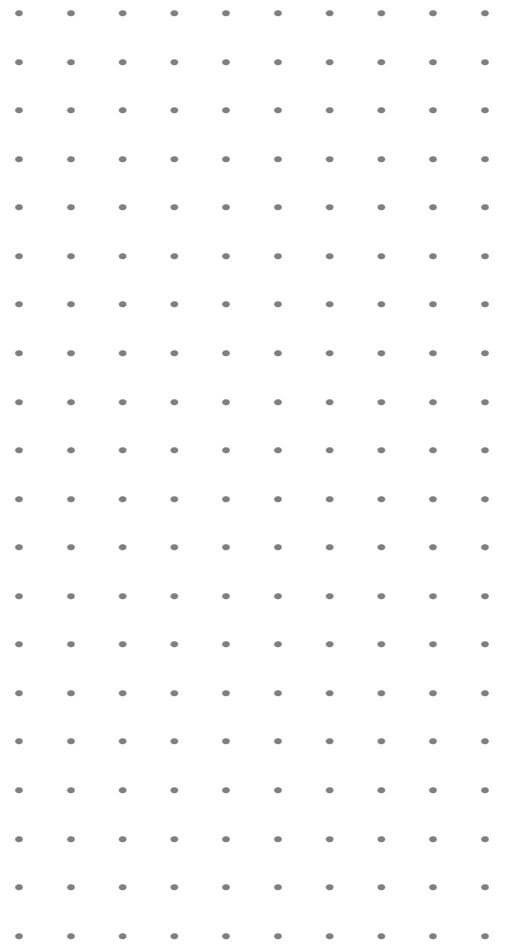
b. Can you make a 16-chair array with 5 rows? Explain.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

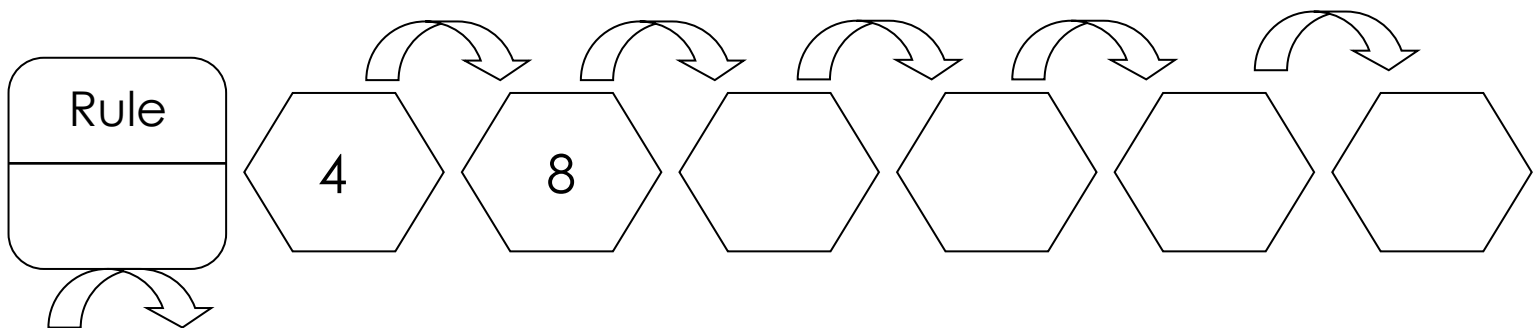
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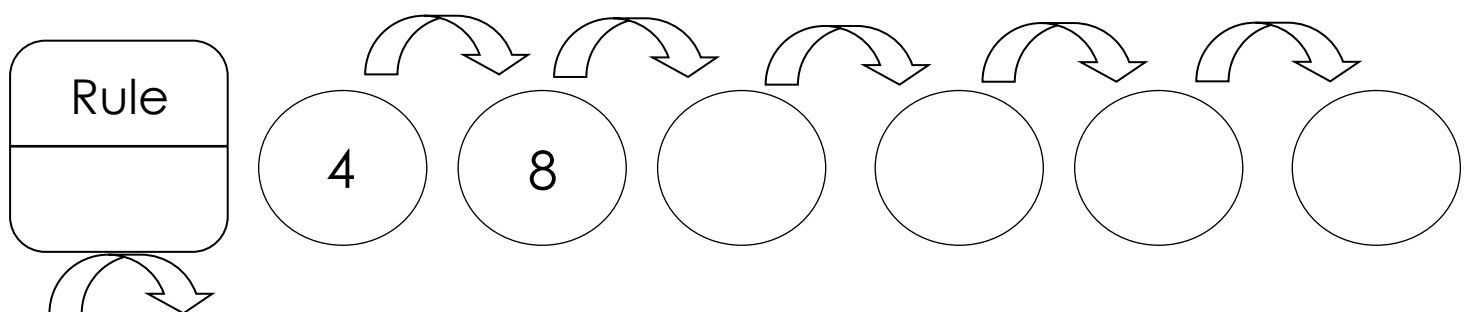
4) Joey is making a Frames-and-Arrows problem.

His first two frames show 4 and then 8.

Write a rule that Joey might be using. Then fill in the frames.



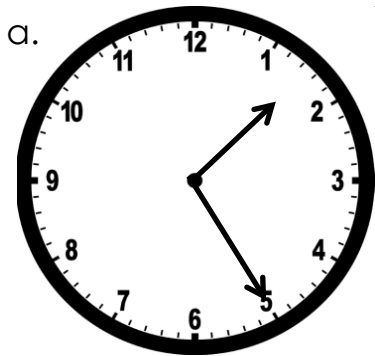
Write a rule that gives different numbers for the other frames. Then fill in the frames.



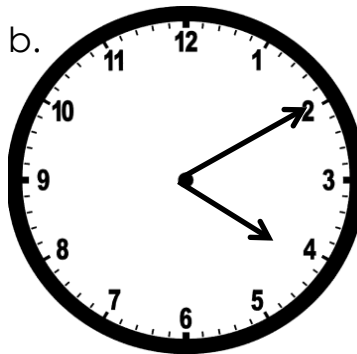
## EVERYDAY MATHEMATICS—3<sup>rd</sup> Grade

### Unit 2 Cumulative Review

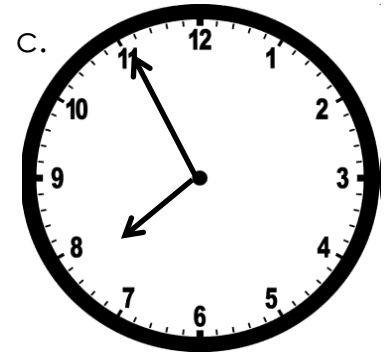
1) Record the time shown on each clock.



\_\_\_\_\_ : \_\_\_\_\_



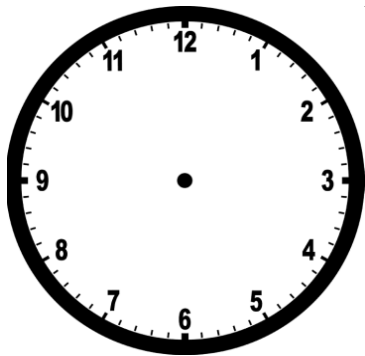
\_\_\_\_\_ : \_\_\_\_\_



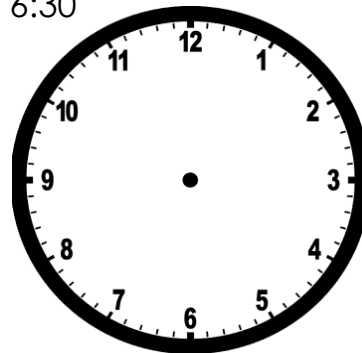
\_\_\_\_\_ : \_\_\_\_\_

2) Draw the hands to show the times.

a. 6:15



b. 6:30



3) Solve.

a.  $8 \times 2 =$  \_\_\_\_\_

b. \_\_\_\_\_  $= 3 \times 3$

c. \_\_\_\_\_  $= 5 \times 4$

d. \_\_\_\_\_  $= 7 \times 10$

e. \_\_\_\_\_  $= 2 \times 4$

f.  $3 \times 4 =$  \_\_\_\_\_

g. Explain how you solved  $7 \times 10$ .

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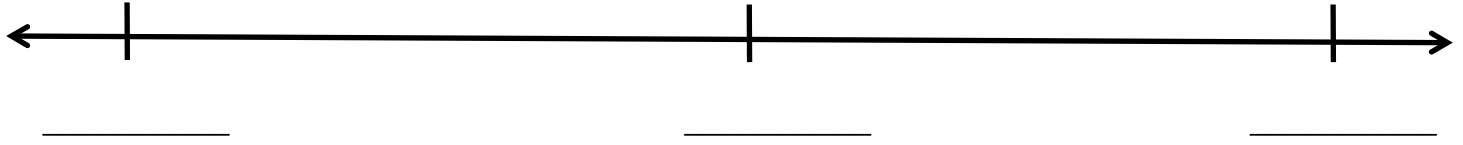


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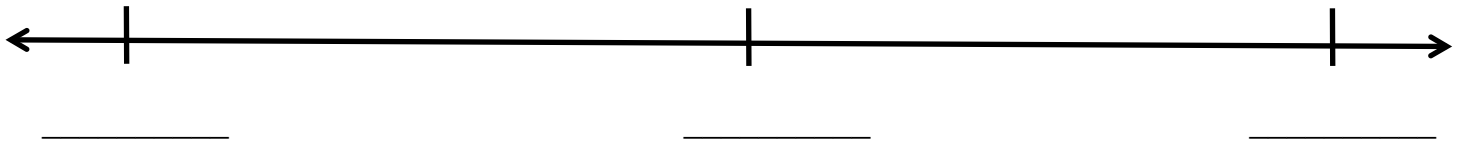
## Unit 2 Cumulative Review (continued)

4) Round each number to the nearest 10.  
You may use open number lines to help.

a. 63 \_\_\_\_\_



b. 27 \_\_\_\_\_



c. Explain how you rounded 27 to the nearest 10.

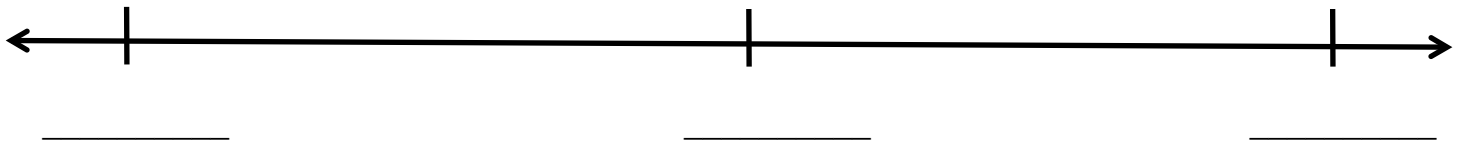
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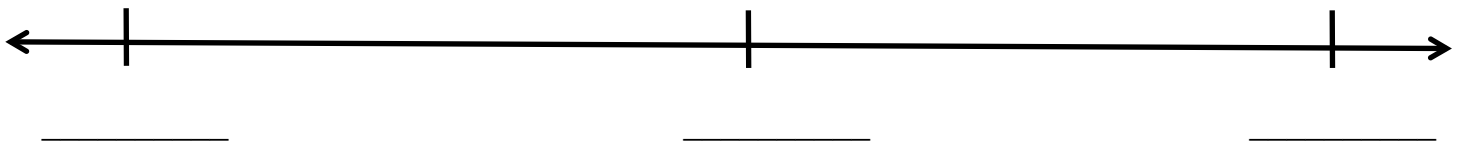
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5) Round each number to the nearest 100.  
You may use open number lines to help.

a. 310 \_\_\_\_\_



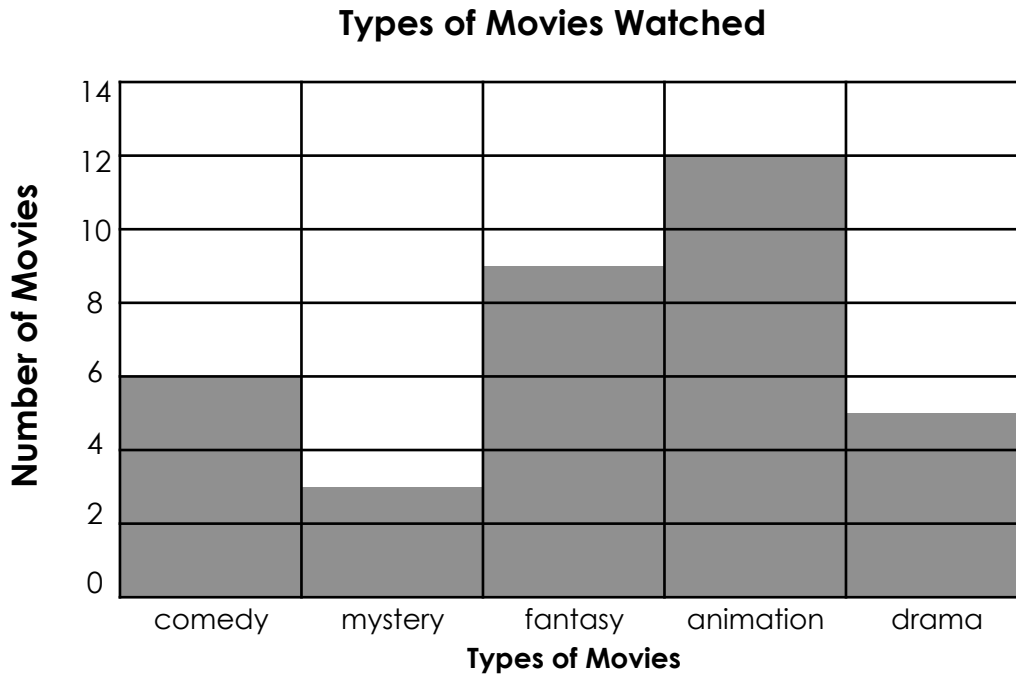
b. 680 \_\_\_\_\_





## Unit 2 Cumulative Review (continued)

6) Use the information in the bar graph to answer the questions below.



- a. How many comedy and mystery movies were watched all together? \_\_\_\_\_
- b. How many more animation movies were watched than fantasy movies? \_\_\_\_\_
- c. How many movies were watched in all? \_\_\_\_\_
- d. Explain how you solved for the number of movies watched in all.

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## EVERYDAY MATHEMATICS—3<sup>rd</sup> Grade

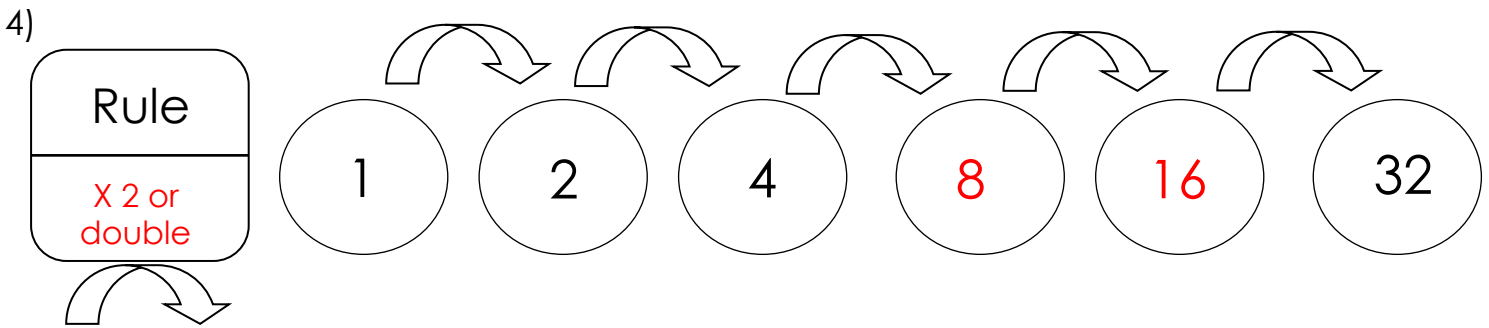
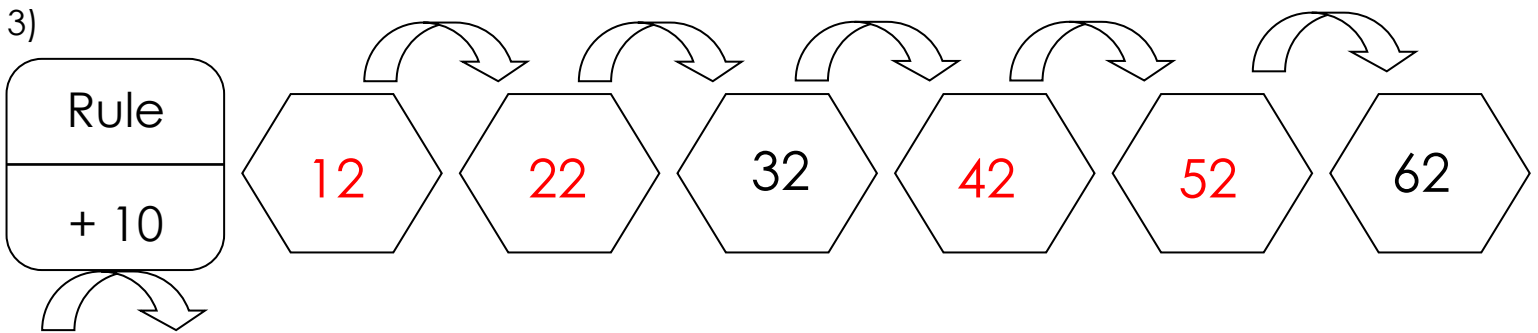
### Unit 2 Review: Number Stories and Arrays

UNIT

Fill in the unit box and the blanks.

1)  $4 + \underline{\quad 8 \quad} = 12$   
 $40 + \underline{\quad 80 \quad} = 120$   
 $400 + \underline{\quad 800 \quad} = 1200$

2)  $16 - 9 = \underline{\quad 7 \quad}$   
 $26 - 9 = \underline{\quad 17 \quad}$   
 $76 - 9 = \underline{\quad 67 \quad}$

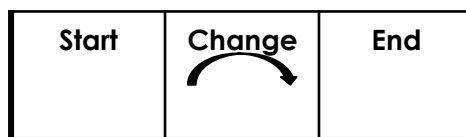
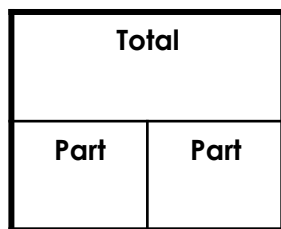


## Unit 2 Review (continued)

**\*ANSWER KEY\***

For each number story, write a number model with a  $?$ .  
Then solve the number story.

You may draw diagrams, like those below, or pictures to help.



5) Madison ran for a total of 48 minutes on Monday and Tuesday. She ran for 30 minutes on Monday. How many minutes did she run on Tuesday?

$$48 - 30 = ? \text{ or } 30 + ? = 48$$

(number model with a  $?$ )

Answer: 18 minutes  
(unit)

How do you know your answer makes sense?

Possible answer: The minutes on Tuesday are less than the total minutes. 18 makes the number model true.

6) One Mississippi alligator clutch has 41 eggs. Another Mississippi alligator clutch has 29 eggs. How many more eggs are in the first clutch?

$$41 - 29 = ? \text{ or } 29 + ? = 41$$

(number model with a  $?$ )

Answer: 12 eggs  
(unit)

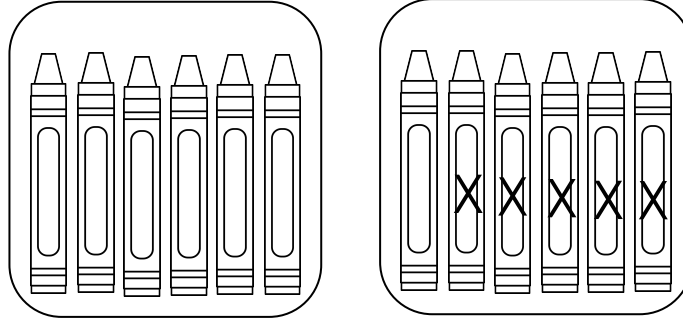
How do you know your answer makes sense?

Possible answer: The difference is smaller than the larger clutch. 12 makes the number model true.

**Unit 2 Review (continued)****\*ANSWER KEY\***

- 7) Camden read the number story below. Then he drew a picture and wrote two number models to keep track of his thinking.

Mrs. Wilson has 2 packs of crayons with 6 crayons in each pack.  
She gives 5 of the crayons to her students.  
How many crayons does she still have?



$$2 \times 6 = 12$$

$$12 - 5 = 7$$

Do Camden's number models fit the number story? Explain your answer.

Yes. Possible answer: They fit because Mrs. Wilson had 2 packs of 6  
crayons each, and that is  $2 \times 6 = 12$ . Then she gave 5 crayons away,  
and that is  $12 - 5 = 7$ . So she has 7 pencils left.

- 8) There are 6 hot dog buns in a pack.  
a. How many hot dog buns are in 6 packs?  
You may draw a picture to help you solve.  
Circle the number model that fits the story.

$6 + 6 = ?$

$6 \times 6 = ?$

Answer: 36 hot dog buns  
(unit)

- b. Explain how you solved Problem 8a.

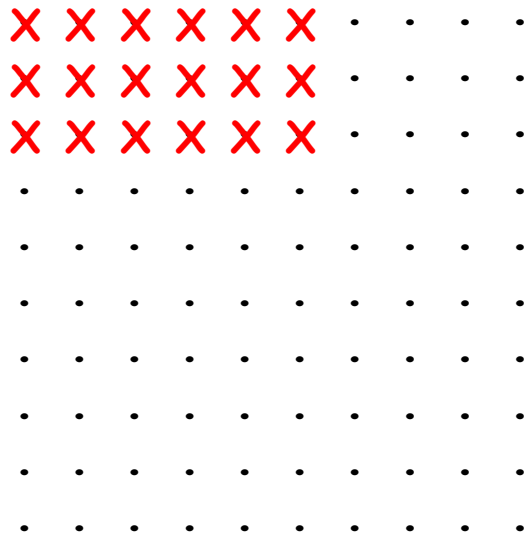
Possible answer: I skip counted by 6s and got 36.

## Unit 2 Review (continued)

**\*ANSWER KEY\***

9) You have 3 rows of chairs with 6 chairs in each row.  
How many chairs do you have in all?

a. Draw an array on the dot grid to match the story.



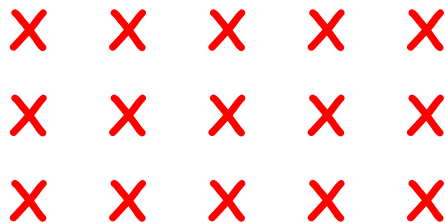
b. Circle the number model that fits the story.

$3 \times 6 = ?$

$3 + 6 = ?$

There are 18 chairs in all.  
(unit)

10) Share 15 marbles equally among 3 friends.  
Draw a picture to show how you shared the marbles.



Each friend gets 5 marbles.  
(unit)

There are 0 marbles left over.  
(unit)

Name: \*ANSWER KEY\* Date: \_\_\_\_\_

## EVERYDAY MATHEMATICS—3<sup>rd</sup> Grade

### Unit 2 Challenge Review

1) Hudson says that knowing  $4 + 6 = 10$  helps him solve this problem on his calculator.

Enter 334. Change it to 370. How? + 36

Explain how Hudson might use the basic fact.

Possible answer: Knowing  $4 + 6$  can help because 6 ones added to 4 ones gets to the next ten. Hudson can add  $334 + 6$  to get to 340 and then add 30 to get to 370. So  $334 + 36 = 370$ .

2) Read the number story and circle the pair of number models that fit the story. Then solve.

Mr. Hernandez equally shared 24 crayons among 4 groups. Sal's group found 6 more crayons. How many crayons does Sal's group have now? You may draw a picture to help.

Circle the pairs of number models that best fit the story.

**A**  $24 \div 4 = 6$

$6 + 6 = 12$

**B**  $24 + 4 = 28$

$28 + 6 = 34$

**C**  $24 \times 4 = 96$

$96 + 6 = 102$

**D**  $24 - 4 = 20$

$20 + 6 = 26$

Sal's group now has 12 crayons.

**Unit 2 Challenge Review (continued) \*ANSWER KEY\***

3) You have 16 chairs that you want to arrange in an array.

a. Show 3 different ways you could do this on a dot grid at the right. Write number models for each array.

Number models:

1 X 16 = 16

4 X 4 = 16

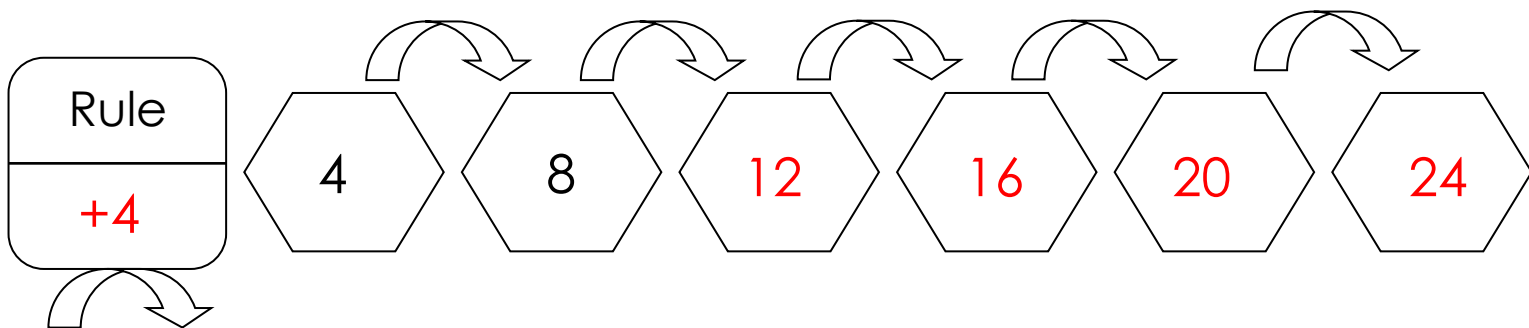
8 X 2 = 16

b. Can you make a 16-chair array with 5 rows? Explain.

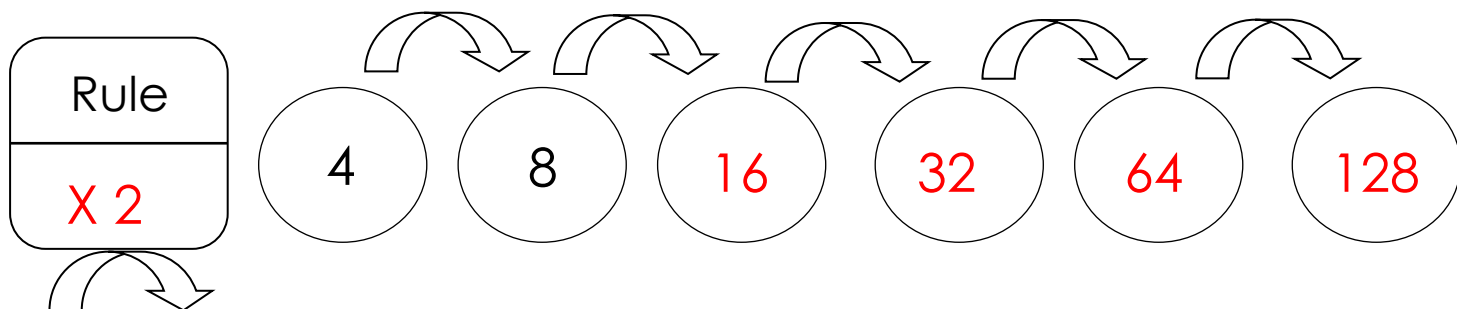
No. Possible explanation: If there were 5 rows and I put 3 in each row, I would have 1 left over. I cannot use 5 rows.



4) Joey is making a Frames-and-Arrows problem. His first two frames show 4 and then 8. Write a rule that Joey might be using. Then fill in the frames.

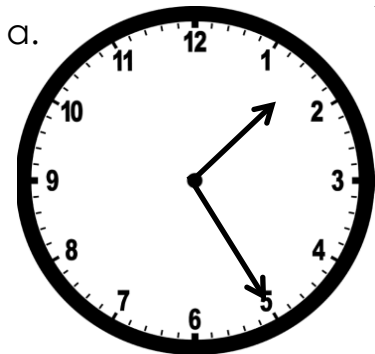


Write a rule that gives different numbers for the other frames. Then fill in the frames.

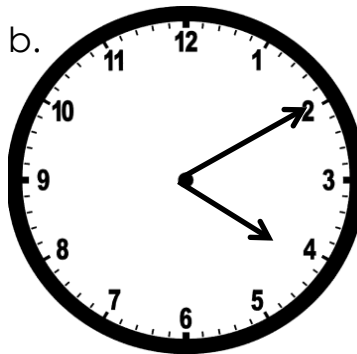


## EVERYDAY MATHEMATICS—3<sup>rd</sup> Grade Unit 2 Cumulative Review

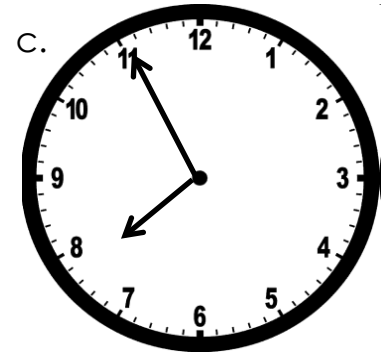
1) Record the time shown on each clock.



1 : 25



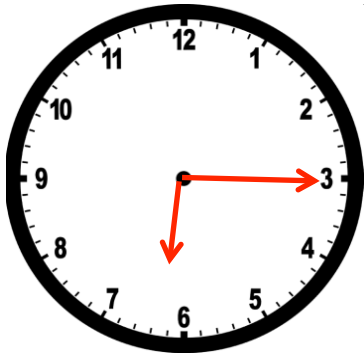
4 : 10



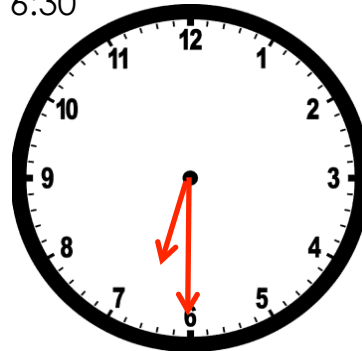
7 : 55

2) Draw the hands to show the times.

a. 6:15



b. 6:30



3) Solve.

a.  $8 \times 2 = \underline{16}$

b.  $\underline{9} = 3 \times 3$

c.  $\underline{20} = 5 \times 4$

d.  $\underline{70} = 7 \times 10$

e.  $\underline{8} = 2 \times 4$

f.  $3 \times 4 = \underline{12}$

g. Explain how you solved  $7 \times 10$ .

Possible answer: I skip counted by 10s seven times. I know that  $7 \times 10$  is 7 tens, which is like 7 base-10 longs, or 70.

\_\_\_\_\_

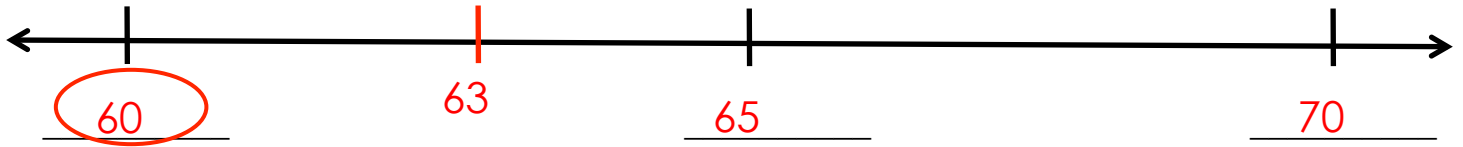
\_\_\_\_\_



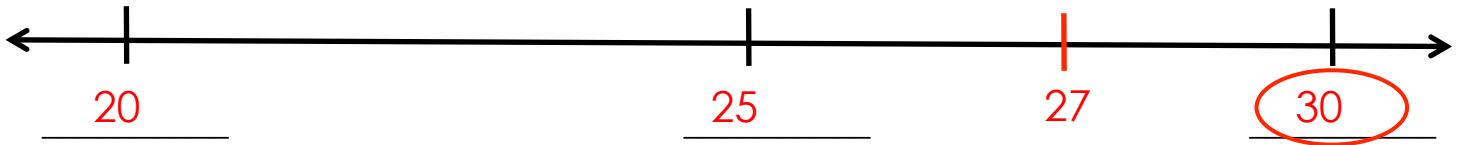
## Unit 2 Cumulative Review (continued) \*ANSWER KEY\*

4) Round each number to the nearest 10.  
You may use open number lines to help.

a. 63 60



b. 27 30



c. Explain how you rounded 27 to the nearest 10.

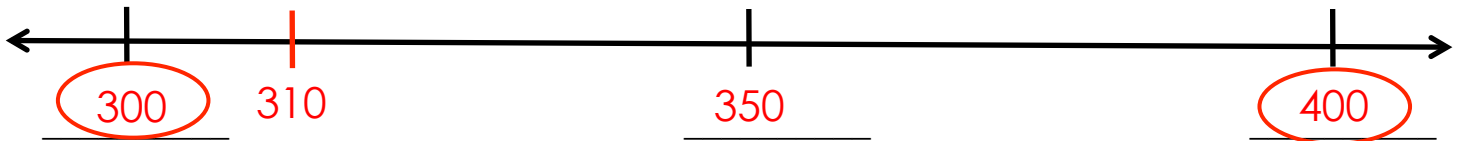
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5) Round each number to the nearest 100.  
You may use open number lines to help.

a. 310 300

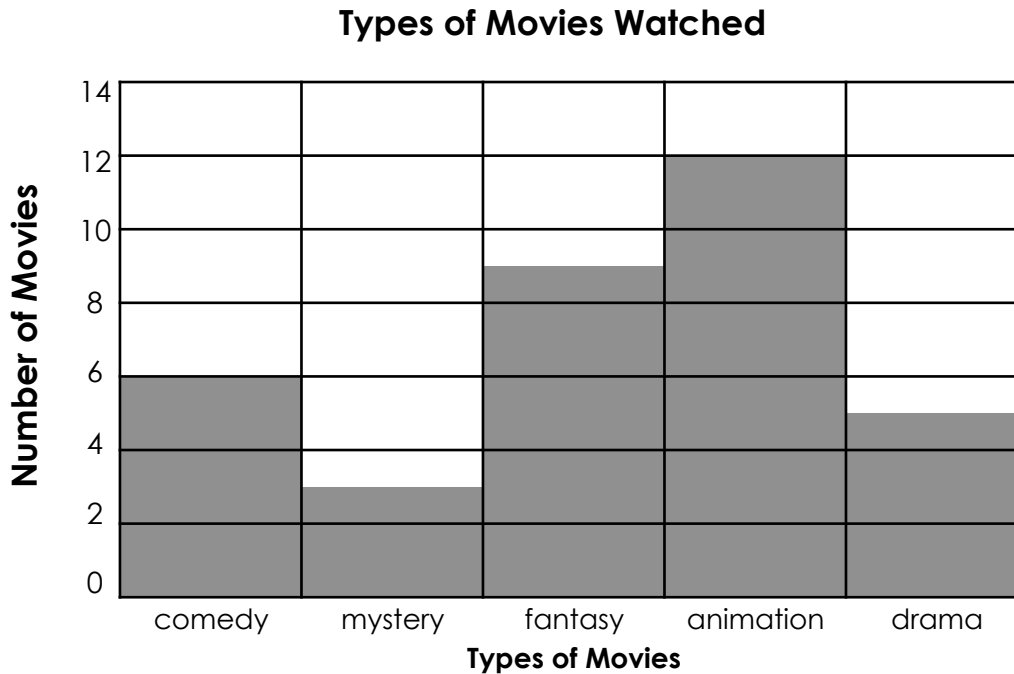


b. 680 700



## Unit 2 Cumulative Review (continued) \*ANSWER KEY\*

6) Use the information in the bar graph to answer the questions below.



- a. How many comedy and mystery movies were watched all together? 9 movies
- b. How many more animation movies were watched than fantasy movies? 3 movies
- c. How many movies were watched in all? 35 movies
- d. Explain how you solved for the number of movies watched in all.

Possible answer: I added 6 + 3 and got 9. Then I added 9 + 9. I got 18.  
Next, I added 18 + 12 and got 30. Then I added 5 more and got 35.

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