

Unit 06 PC Form A

1.  **Use pencil and paper to answer the question.**

There are 67 crackers in a box. Deon and his six brothers decide to share them equally. How many whole crackers will each boy get?

Number model: _____

Answer: _____ crackers

ANSWER: Number model: $67 \div 7 \rightarrow 9 \text{ R}4$

Each boy will get 9 crackers. There will be 4 crackers left over.

2.  **Use pencil and paper to answer the question.**

There are 45 marbles in a box. Nigel and his five brothers decide to share them equally. How many whole marbles will each boy get?

Number model with unknown: _____

Answer: _____ marbles

Summary number model: _____

ANSWER: Sample number models are given.

$$45 \div 6 = m$$

$$m = 7 \text{ marbles}$$

$$45 \div 6 \rightarrow 7 \text{ R}3$$

3.  **Use pencil and paper to answer the question.**

Reginald baked 69 brownies for the school carnival. He put the brownies on plates. Each plate holds 8 brownies. How many plates were needed to hold all of the brownies?

Number model: _____

Answer: _____ plates

ANSWER: Number model: $69 \div 8 \rightarrow 8 \text{ R}5$; 9 plates

4.  **Use pencil and paper to answer the question.**

Malik built 74 birdhouses to sell at a school fundraiser. He put the birdhouses in boxes. Each box holds 8 birdhouses. How many boxes were needed to hold all of the birdhouses?

Number model with unknown: _____

Answer: _____ boxes

Summary number model: _____

ANSWER: Sample number models are given.

$$74 \div 8 = b$$

$$10 \text{ boxes}$$

$$74 \div 8 \rightarrow 9 \text{ R}2$$

5. Divide. If there is a remainder, write it as a fraction.

$$\begin{array}{r} 7 \overline{)102} \end{array}$$

Answer: _____

a. $14 \frac{4}{7}$

b. 14

c. $13 \frac{4}{7}$

d. $14 \frac{1}{7}$

ANSWER: a

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6. Divide. If there is a remainder, write it as a fraction.

$168 \div 8$ Answer: _____

- a. 21 b. 20 c. 31 d. 10

ANSWER: a

7.  **Use pencil and paper to answer the question.**

Divide. If there is a remainder, write it as a fraction.

a. $5 \overline{)405}$ Answer: _____

b. $157 \div 9$ Answer: _____

ANSWER: a. 81

b. $17 \frac{4}{9}$

8.  **Use pencil and paper to answer the question.**

Mrs. Gutierrez wants to buy a rug and pay for it in 1 year. The store offers two payment plans, and she wants to choose the cheaper one.

Plan A: \$13 each week; a total of 52 payments

Plan B: \$56 each month; a total of 12 payments

Which plan would cost less? _____

Explain your answer.

ANSWER: Plan B would cost less.

Sample answer:

Plan A would cost $\$13 * 52 = \676 .

Plan B would cost $\$56 * 12 = \672 .

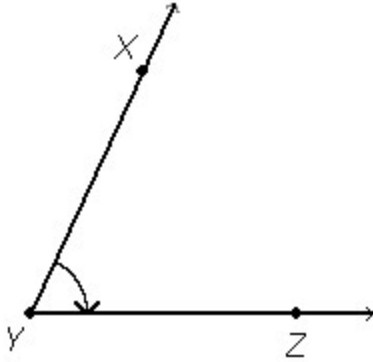
Plan B costs less than Plan A.

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9.  Use pencil and paper to answer the question.

Determine whether $\angle XYZ$ is acute, right, or obtuse. _____

Find the measure of $\angle XYZ$: _____°

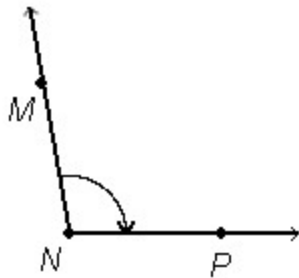


ANSWER: Acute, 65°

10.  Use pencil and paper to answer the question.

Determine whether $\angle MNP$ is acute, right, or obtuse. _____

Find the measure of $\angle MNP$: _____°



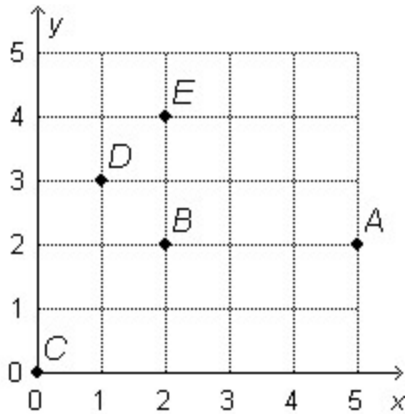
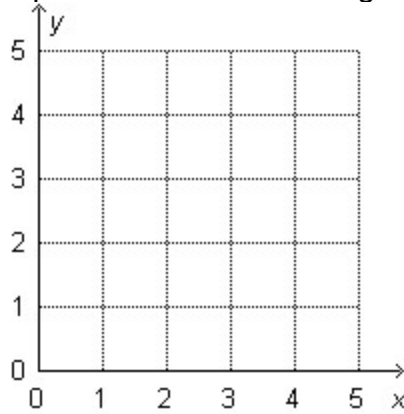
ANSWER: Obtuse, 100°

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11.  Use pencil and paper to answer the question.

Plot and label each point on the coordinate grid.

- A (5,2)
- B (2,2)
- C (0,0)
- D (1,3)
- E (2,4)



ANSWER:

12.  Use pencil and paper to answer the question.

Insert parentheses to make the number statement true.

$$6 + 5 * 7 = 77$$

ANSWER: $(6+5) * 7 = 77$

13.  Use pencil and paper to answer the question.

Insert parentheses to make the number statement true.

$$41 = 7 * 3 + 5 * 4$$

ANSWER: $41 = (7 * 3) + (5 * 4)$

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- 14.
- 
- Use pencil and paper to answer the question.

Insert parentheses to make the number statement true.

$$2 + 8 * 8 = 2 * 3 * 11$$

$$\text{ANSWER: } 2 + (8 * 8) = (2 * 3) * 11$$

OR

$$2 + (8 * 8) = 2 * (3 * 11)$$

OR

$$2 + (8 * 8) = 2 * 3 * 11$$

- 15.
- 
- Use pencil and paper to answer the question.

Insert parentheses to make the number statement true.

$$6 + 6 * 7 \div 6 = 8$$

$$\text{ANSWER: } (6 + (6 * 7)) \div 6 = 8$$

- 16.
- 
- Use pencil and paper to answer the question.

Insert parentheses to make these number sentences true.

$$\text{a. } 9 + 1 * 6 = 60$$

$$\text{b. } 38 = 6 * 3 + 5 * 4$$

$$\text{c. } 8 + 9 * 4 = 2 * 2 * 11$$

$$\text{d. } 1 + 5 * 7 \div 4 = 9$$

ANSWER:

$$\text{a. } (9 + 1) * 6 = 60$$

$$\text{b. } 38 = (6 * 3) + (5 * 4)$$

$$\text{c. } 8 + (9 * 4) = (2 * 2) * 11 \text{ OR } 8 + (9 * 4) = 2 * (2 * 11) \text{ OR}$$

$$8 + (9 * 4) = 2 * 2 * 11$$

$$\text{d. } (1 + (5 * 7)) \div 4 = 9$$

17. Round to the nearest hundred.

$$456,983 \quad \underline{\hspace{2cm}}$$

$$\text{ANSWER: } 457,000$$

$$457000$$

18. Round to the nearest ten.

$$6,665,423 \quad \underline{\hspace{2cm}}$$

$$\text{ANSWER: } 6,665,420$$

$$6665420$$

19. Round to the nearest thousand.

$$74,104,715 \quad \underline{\hspace{2cm}}$$

$$\text{ANSWER: } 74,105,000$$

$$74105000$$

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20. Round to the nearest hundred.

227,416,531 _____

ANSWER: 227,416,500
227416500

21.  Use pencil and paper to answer the question.

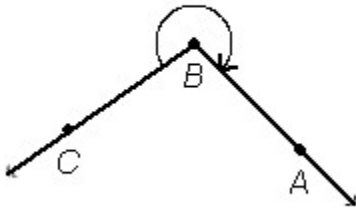
Round these numbers to the nearest ten thousand.

- a. 358,519 _____
- b. 7,388,949 _____
- c. 65,443,369 _____
- d. 583,228,251 _____

ANSWER:

- a. 360,000
- b. 7,390,000
- c. 65,440,000
- d. 583,230,000

22. Measure reflex angle CBA . _____^o



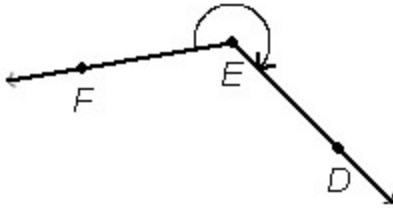
ANSWER: 260

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23.  Use pencil and paper to answer the question.

Draw reflex angle DEF so that it measures 235° .

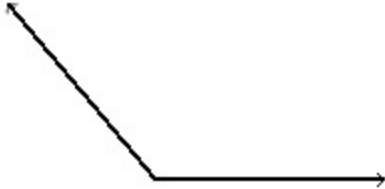
ANSWER: Student's angle should be labeled with E as the vertex and D and F on opposite sides of the angle. Check that the measure of the reflex angle is 235° .



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24.  Use pencil and paper to answer the question.

Three students measured the angle below.



- Bill used his half-circle protractor.
He said the angle measure is about 50° .
- Jayla used her half-circle protractor.
She said the angle measure is about 130° .
- Hugo used his full-circle protractor.
He said the angle measure is about 230° .

Use your half-circle and your full-circle protractor to measure the angle. Do you agree with Bill, Jayla, or Hugo? Why?

ANSWER: Sample answer: Jayla and Hugo; it depends which way you measure. The obtuse angle is 130° , but the reflex angle is 230° . Bill must have used the wrong scale on the half-circle protractor.

25. Divide. If there is a remainder, write it as a fraction.

$599 \div 16$ Answer: _____

- a. $37 \frac{7}{16}$ b. $37 \frac{8}{16}$ c. $38 \frac{7}{16}$ d. $36 \frac{8}{16}$

ANSWER: a

26. Divide. If there is a remainder, write it as a fraction.

$38 \overline{)646}$ Answer: _____

- a. 17 b. $16 \frac{11}{38}$ c. $17 \frac{11}{38}$ d. 16

ANSWER: a

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27.  Use pencil and paper to answer the question.

Divide. If there is a remainder, write it as a fraction.

a. $26 \overline{)494}$

Answer: _____

b. $325 \div 12$

Answer: _____

ANSWER: a. 19

b. $27 \frac{1}{12}$

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28.  Use pencil and paper to answer the question.

A Trip to Adventure Land

The students in Ms. Clare's and Mr. Kelly's classes at Ridge Elementary School are going on a field trip to Adventure Land. There are 30 students in each class.

Mr. Kelly's class secretary has the following information about admission prices:

Adventure Land
Special Group Rates:
One Class - \$90.00

Adults (1 for every 10 students) - Free

It costs \$90.00 to rent a bus for a day. One bus can hold 68 people.

Calculate the amount of money each student needs to pay for the trip.
Explain your strategy below.

ANSWER: There are 30 students in each class, so 60 students are going. That means they need 6 adults to go. So 66 people are going.
Since a bus holds 68 people, one bus will be enough.
The cost to get into Adventure Land will be $\$90.00 \times 2$, which is \$180.00.
The bus costs \$90.00, so the total cost of the trip is $\$180.00 + \$90.00 = \$270.00$.
There are 60 students, so divide \$270.00 by 60 to get \$4.50.
To be safe, have each student pay \$5.00. \$5.00 times 60 is \$300.00, so there will be enough money.