Chapter 3 Exam v2

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

Provide an appropriate response.

1) Show that $1010_{two} = 20_{five}$. 1) _____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Identify the base used in the computation.

2) 2) _____

$$\begin{array}{r} 2030 \\ -\ 234 \\ \hline 1241 \end{array}$$

A) Base seven B) Base six C) Base four D) Base five

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

Provide an appropriate response.

3) In the set of whole numbers, is 1 – 9 meaningful? Explain. 3) _____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Perform the following division.

4) $6\overline{)61}$ 4) _____

A) 9 R1 B) 10 C) 10 R1 D) 10 R2

Solve the problem.

5) There are 723 jelly beans in a jar. If 42 people take 17 jelly beans each from the jar, then how many are left? 5) _____

A) 12 B) 9 C) 14 D) 8

Use the method suggested to compute mentally.

6) Use breaking and bridging. 6) _____

$$\begin{array}{r} 82 \\ -\ 49 \\ \hline \end{array}$$

A) 34 B) 33 C) 31 D) 32

Find the solutions in the set W.

7) $x + 4 = 9 + 8$ 7) _____

A) 21 B) –5 C) 5 D) 13

Perform the indicated operation.

8) $110_{two} - 11_{two}$ 8) _____

A) None of these B) 100_{two} C) 10_{two} D) 11_{two}

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Solve the problem.

9) An elementary school has 14 classrooms, each of which can take 28 children. How many children can the school accept for admission? 9) _____

A) 406 B) 420 C) 402 D) 392

Estimate the answer to the problem.

10) Each gallon of porch and deck paint covers 200 square feet. How many gallons are needed to cover 1366 square feet? 10) _____

A) 6 B) 7 C) 5 D) 8

Find the missing numbers.

11) 11) _____

$$\begin{array}{rcccc} & 3 & (a) & (b) & 5 \\ - & & 4 & 5 & 7 \\ \hline & 2 & 8 & 6 & (c) \end{array}$$

A) (a) = 4, (b) = 3, (c) = 9 B) (a) = 1, (b) = 2, (c) = 8
C) (a) = 3, (b) = 2, (c) = 8 D) (a) = 2, (b) = 2, (c) = 8

Identify the base used in the computation.

12) 12) _____

$$\begin{array}{r} 321 \\ +\ 313 \\ \hline 1300 \end{array}$$

A) Base three B) Base four C) Base five D) Base two

Find, if possible, the whole number that makes the equation true.

13) $\square \div 0 =$ undefined 13) _____

A) No whole number B) 0
C) 1 D) Any whole number

Perform the following division.

14) $8\overline{)104}$ 14) _____

A) 13 B) 14 R1 C) 13 R1 D) 13 R2

Use the method suggested to compute mentally.

15) Use the method of breaking up the dividend. 15) _____

$15\overline{)120}$

A) 11 B) 8 C) 9 D) 7

Simplify the following. Leave answer as a power.

16) $9^{39} \div 9^{15}$ 16) _____

A) 18^{24} B) 24 C) 9^{9} D) 9^{24}

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State the property that is illustrated.

17) $2 \cdot 11 = 11 \cdot 2$ 17) _____

A) distributive property of multiplication over addition
B) commutative property of multiplication
C) identity property of multiplication
D) associative property of multiplication

Estimate the answer to the problem.

18) James' drive from home to work is 32 miles one way. If in a month he goes to work 19 days, then how many miles does he drive going from home to work and back in one month? 18) _____

A) 1500 B) 1750 C) 1200 D) 900

Use the distributive property to factor the following.

19) $x^2y - xy^2$ 19) _____

A) $xy(x - y)$ B) $x^2(y - y^2)$ C) $x(xy - y)$ D) $x^2(y - xy)$

Use the method suggested to compute mentally.

20) Use front–end multiplying. 20) _____

$$\begin{array}{r} 11 \\ \times\ 49 \\ \hline \end{array}$$

A) 542 B) 541 C) 539 D) 540

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