3.2.22 Dividing Polynomials & Exponent Laws 1
MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Evaluate the expression.

1) $2x^2yz$ for $x = -2$, $y = -2$, and $z = 3$

    A) 48   B) 24   C) -48   D) -24

1) _____

2) cx^3 for $c = -5$ and $x = 4$

    A) -80   B) -320   C) -60   D) 59

2) _____

3) $4x^2 + 7y$ for $x = 6$ and $y = 9$

    A) 639   B) 1548   C) 366   D) 207

3) _____

Evaluate the expression, given $x = -2$, $y = 3$, and $a = -4$.

4) $(-3a)(8x + 4y)$

    A) 192   B) 336   C) -48   D) 48

4) _____

5) $2a^3x - y^2(5y - 6x^2)$

    A) 175   B) 95   C) 337   D) -175

5) _____

6) $-x^2 - (5y^2 - 7x)$

    A) -55   B) -27   C) -63   D) 55

6) _____

Find the quotient.

7) $\dfrac{-10}{0}$

    A) 1   B) Undefined   C) 10   D) 0

7) _____

8) $\dfrac{-216}{8}$

    A) 27   B) -27   C) $-\dfrac{1}{27}$ D) -37

8) _____

9) $\dfrac{0}{-45}$

    A) 1   B) 45   C) 0   D) undefined

9) _____

Evaluate.

10) $4 + 9(-6)$

    A) 50   B) -50   C) -78   D) 78

10) _____

11) $\left|6 - 10 \cdot 3\right| \cdot \left|5 - 6^2 + 3\right|$

    A) 336   B) -336   C) 672   D) -672

11) _____

12) $\left| 8(2 - 7) \right| - \left| 4 \cdot 2^2 - 26 \right|$

    A) 128   B) 30   C) -30   D) 50

12) _____

13) $-60 \div (6^2 - 6)$ 13) _____

    A) -2   B) $\dfrac{25}{3}$ C) $-\dfrac{25}{3}$ D) 2

14) $-3^2(7 - 3^2)$ 14) _____

    A) -54   B) 18   C) 144   D) -18

15) $2(5^2 + 35) \div (-12)$ 15) _____

    A) $-\dfrac{565}{12}$ B) $\dfrac{565}{12}$ C) 10   D) -10

Solve the problem.

16) Connor recently sold some of his stock. He made a profit of $3 per share on 13 shares, made a   16) _____
profit of $9 per share on 5 shares, and had a loss of $4 per share on 8 shares. What was his net
profit/loss on the sale of stock.

    A) $52 loss   B) $116 profit   C) $52 profit   D) $116 loss

17) During a recent price war among car dealerships, 34 cars at one dealership were sold at a   17) _____
profit of $685 per car and 59 cars were sold at a loss of $575 per car. Find the net profit/loss for
this car dealership.

    A) $57,215 profit   B) $57,215 loss   C) $10,635 loss   D) $10,635 profit

Solve.

18) When a low-pressure system moved through an area, the barometer dropped 12 millibars in   18) _____
three hours. Using a signed number, find the average drop per hour.

    A) +4 millibars per hour   B) -36 millibars per hour
    C) +36 millibars per hour   D) -4 millibars per hour

19) On an expressway off-ramp, the road slopes downward five feet per 111 feet. Using a signed   19) _____
number, find the rate at which the road drops per foot.

    A) $-\dfrac{111}{5}$ ft per foot   B) -5 ft per foot

    C) $-\dfrac{1}{111}$ ft per foot   D) $-\dfrac{5}{111}$ ft per foot

Write a numerical expression for the phrase and simplify it.

20) The quotient of 42 and -7 decreased by -8   20) _____

    A) $\dfrac{42}{7} - 8$; -2   B) $\dfrac{42}{7} - (-8)$; 14   C) $\dfrac{42}{-7} - 8$; -14   D) $\dfrac{42}{-7} - (-8)$; 2

21) The quotient of -24 and -3   21) _____

    A) $\dfrac{-24}{-3}$; $\dfrac{1}{8}$ B) $\dfrac{-24}{-3}$; 8   C) $\dfrac{-3}{-24}$; $\dfrac{1}{8}$ D) (-3)(-24); 72

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Simplify.

22) $\dfrac{7^2 + (11 - 6)^2}{12 \div 4 - (1 + 1)}$

22) _____

    A) 74   B) 24   C) 134   D) 2030

23) $\dfrac{-19 + 5^2 - (-9)}{-24 - 9 + 36}$

23) _____

    A) -5   B) 5   C) -10   D) 10

24) $\dfrac{7^3 \cdot (-2 - 5) - 6(-3)}{119 + 7(-6 \cdot 3) + 2 \cdot 3}$

24) _____

    A) -325   B) 325   C) -2383   D) 2383

Answer Key
Testname: 3.2.22 DIVIDING POLY EXPONENT RULES 1

1) C
2) B
3) D
4) C
5) C
6) C
7) B
8) B
9) C
10) B
11) C
12) B
13) A
14) B
15) D
16) C
17) C
18) D
19) D
20) D
21) B
22) A
23) B
24) D