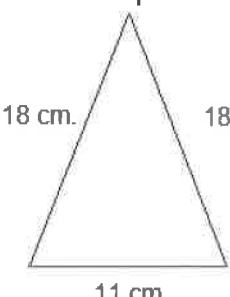


Math 9 – Midterm Exam

Name

Key

For each problem, perform the operation or answer the question, showing work for possible partial credit.

<p>1. a) The result of a division problem is called a <u>quotient</u></p> <p>b) The result of a subtraction problem is called a <u>difference</u></p> <p>c) The result of an addition problem is called a <u>sum</u></p> <p>d) The result of a multiplication problem is called a <u>product</u></p>	<p>2. Simplify: $381 \div 4 =$</p> $\begin{array}{r} 95 \frac{1}{4} \text{ or } 95 R1 \\ 4 \overline{) 381} \\ \underline{-36} \\ 21 \\ \underline{-20} \\ 1 \end{array}$
<p>3. Simplify: $532 \times 100 =$</p> <p><u>53,200</u></p>	<p>4. Simplify: $4000 - 279 =$</p> $\begin{array}{r} 399 \\ 4000 \\ \underline{-279} \\ 3721 \end{array}$
<p>5. If tuition costs \$46 per unit, what is the cost of 16 units?</p> $\begin{array}{r} 3 \\ 46 \\ \times 16 \\ \hline 276 \\ 46 \\ \hline \$736 \end{array}$	<p>6. Find the perimeter of the triangle:</p>  $\begin{array}{r} 18 \\ 18 \\ 11 \\ \hline 47 \text{ cm} \end{array}$
<p>7. Use $<$ or $>$ to write a true statement.</p> <p>$0 > -12$</p> <p>$-25 < -2$</p>	<p>8. Find the absolute values:</p> <p>a) $52 = 52$</p> <p>b) $-41 = 41$</p>

needs

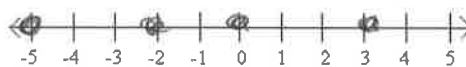
9. A bookstore ~~buys~~ 870 copies of a book. Each crate holds 50 books. How many crates of books must be bought?

$$\begin{array}{r} 870 \\ \underline{50} \end{array}$$

$$5 \overline{) 870} \begin{array}{r} 174 \\ \underline{-5} \\ 37 \\ \underline{35} \\ 2 \end{array}$$

buy 18

10. Graph the following numbers on a number line: -2, 3, 0, -5



11. Circle each number if 7130 is divisible by it.

- (2) even
- 3 $7+1+3 = 11 \neq 0$
- 4 30 not div. by 4 \rightarrow no
- (5) ends in 0

12. Simplify each division problem:

$$\frac{0}{11} = 0 \quad \frac{23}{23} = 1$$

$$\frac{-6}{1} = -6 \quad \frac{-17}{0} \Rightarrow \text{undefined}$$

13. Simplify:

- 57 + 20

$$\begin{array}{r} -57 \\ + 20 \\ \hline -37 \end{array}$$

14. Simplify:

- 19 - 12

$\uparrow \uparrow$
both neg

$$\begin{array}{r} -19 \\ -12 \\ \hline -31 \end{array}$$

15. Simplify: $7 - (-8) - 14$

$$\begin{array}{l} ++ \\ 7 + 8 - 14 \\ 15 - 14 = 1 \end{array}$$

16. Simplify: $22 - 9 + 22 + (-15)$

$$\begin{array}{r} \text{POS} \quad \text{Neg} \\ 22 \quad -9 \\ \hline 22 \quad -15 \\ \hline 44 + (-24) = 20 \end{array}$$

17. Simplify: $(-2)(-11)(-5)$

$$\begin{array}{l} (-) 2 \cdot 11 \cdot 5 = -10 \cdot 11 \\ = -110 \end{array}$$

18. The temperature in Juneau, AK began at -19° and increased 28° by afternoon. What was the afternoon temperature?

$$\begin{array}{l} -19 + 28 = 9 \\ \uparrow \text{increased} \end{array}$$

<p>19. Round 58, 207, 132 to</p> <p>a) the nearest million 58, 000, 000</p> <p>b) the nearest ten-thousand 58, 210, 000</p>	<p>20. Estimate using front-end rounding. Then find the exact value</p> <p>928 + 1081 + 493</p> <p>900 + 1000 + 500 = 2400</p> $\begin{array}{r} 928 \\ 1081 \\ 493 \\ \hline 2502 \end{array} = 2502$
<p>21. Simplify:</p> <p>-30 ÷ 6 - 4(5)</p> <p>$-5 - 20 = -25$</p> <p>PE MD/DM AS/SA</p>	<p>22. For the number: 283,501,697</p> <p>a) What digit is in the millions place? 3</p> <p>b) What digit is in the ten thousands place? 0</p> <p>c) What digit is in the hundreds place? 6</p> <p>d) What digit is in the tens place? 9</p>
<p>23. Simplify: $\frac{4(2-5)}{11-3^2} = \frac{4(-3)}{11-9}$</p> <p>$= \frac{-12}{2} = -6$</p>	<p>24. Simplify: $-6^2 = -36$</p> <p>$-6 \cdot 6$</p> <p>$(-5)^2 = 25$</p> <p>$(-5)(-5) \rightarrow$</p>
<p>25. Simplify: $\frac{-11+6}{2(4)-3^2} = \frac{-5}{8-9} = \frac{-5}{-1} = \oplus 5 = 5$</p>	

