

Geometry Test 1

Work in your NOTEBOOK!

1. Evaluate:

(a) $7 - 12$

(b) 4^2

(c) $7 - 2 \cdot 3$

(d) $4 \cdot (7 - 2)$

(e) $6 - 8/2$

2. Substitute $x = 2, y = -12, z = 4$ into the expression $xy - z$.

3. Compare the following decimals with $<$, $>$ or $=$:

(a) 0.5 _____ 0.4

(b) 0.415 _____ 0.5

(c) 3.131000 _____ 3.131

4. Evaluate:

(a) $3.4 + 5.2$

(b) $2.4 + 3.815$

(c) $9.6 - 3.7$

(d) $15.4 \div 4$

5. Substitute $x = 1.6, y = -4.2$ into xy .

6. Write in scientific notation:

(a) 54000

(b) 514

(c) 0.0054

7. Write each number as a decimal number

(a) 6.7×10^3

(b) 5.14×10^{-3}

8. Add or subtract the following fractions

(a) $\frac{1}{5} + \frac{3}{5}$

(b) $\frac{1}{4} + \frac{1}{5}$

(c) $\frac{7}{3} - \frac{3}{4}$

9. Compare the fractions using $<$, $>$ and $=$:

(a) $\frac{2}{7}$ _____ $\frac{1}{7}$

(b) $\frac{-8}{9}$ _____ $\frac{2}{9}$

(c) $\frac{3}{5}$ _____ $\frac{4}{7}$

10. Simplify the following fractions:

(a) $\frac{3}{6}$

(b) $\frac{10}{18}$

(c) $\frac{10x^2}{18x^4}$

11. Convert the $\frac{3}{7}$ to a decimal.

12. Convert the 0.73 to a fraction.

13. Perform the indicated operations:

(a) $\frac{3}{7} \cdot \frac{4}{5}$

(b) $\frac{4}{5} \div \frac{1}{3}$

14. Illustrate each of the following by labeling two points P and T and drawing the picture:

(a) R_{TP}

(b) \overline{TP}

(c) L_{TP}

15. Construct a triangle whose sides are length 3 cm, 5 cm, and 6 cm. What are the angles of that triangle.

16. There are 360° longitude on the earth. How long is one degree if the circumference of the earth is 24,000 mile?

17. What is the definition of supplementary angles?

18. We have 2 points X and Y that are both less than 8 cm from a point Z :

(a) Draw a picture of the situation.

(b) What is the largest the distance from X to Y could be?

(c) What is the smallest the distance from X to Y could be?

19. Use a protractor to draw an angle of 60° :

20. Given the image below, and $m\angle BAC = 32^\circ$ and $m\angle BAD = 63^\circ$ find $m\angle CAD$.

