

# Grade 8



Student Name: \_\_\_\_\_

---

## Algebra

1. Evaluate.

a.  $a - 4b + 5c$ , when  $a = 3$ ,  $b = -1$ , and  $c = -2$ . \_\_\_\_\_

b.  $5 = 3n - 6$ ,  $n =$  \_\_\_\_\_      c.  $3x + 12 = 5x - 2$ ,  $x =$  \_\_\_\_\_

## Integers

1. Solve.

a.  $(-4) - 3 + (-2) =$  \_\_\_\_\_      b.  $(-8) + 15 \div (-3) + 7 =$  \_\_\_\_\_

c.  $\frac{(-6)(8-2)}{-4} =$  \_\_\_\_\_

# Grade 8

## Solving Problems

1. A factory produces 900 items per week at a unit cost of \$75. New equipment is installed that increases the productivity by 12% and reduces the production costs by 16%.

a. What is the new production rate?

---

b. What is the new unit cost?

---

## Fractions

1. Solve.

a.  $\frac{5}{8} + \frac{6}{4} - \frac{1}{3} =$

b.  $3\frac{3}{5} - 1\frac{5}{6} + \frac{7}{10} =$

2. Write each fraction as a decimal and a percentage.

a.  $\frac{4}{5} =$  \_\_\_\_\_, \_\_\_\_\_

b.  $\frac{15}{6000} =$  \_\_\_\_\_, \_\_\_\_\_

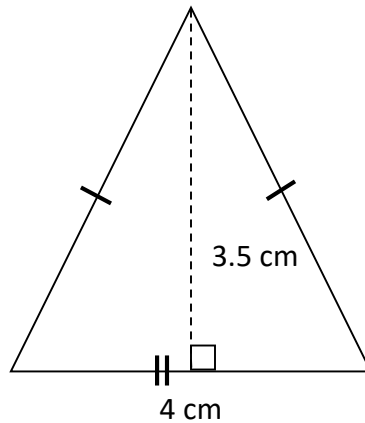
# Grade 8

## Geometry

1. Calculate the area of the triangle, and approximate the length of the hypotenuse.

a. Area = \_\_\_\_\_

b. Hypotenuse = \_\_\_\_\_



2. Calculate the volume.

a. Volume = \_\_\_\_\_

