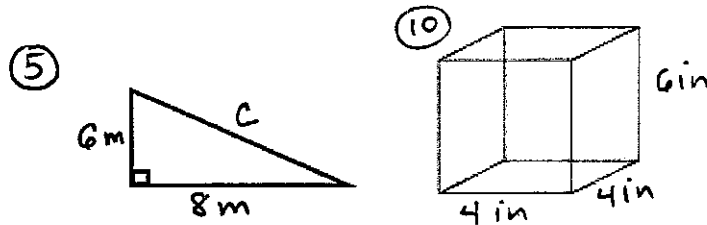


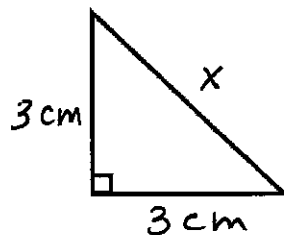
### Week #1

1. What is a polynomial with one term called?
2. Solve for  $b$ :  $2(3 - b) = b - 5$
3. Sketch the points  $(3, 1)$  and  $(5, 5)$ , and draw the line that goes through them. Then calculate the slope of the line.
4. Use unit multipliers to convert 3 miles to feet.
5. Use the Pythagorean Theorem to find the missing side of the triangle shown below number 10.
6. Evaluate:  $-x^0 - a(x - 2a)$  if  $x = -5, a = 3$
7. The sum of twice a number and 13 is 75. Find the number.
8. The ratio of brigands to highway robbers was 15 to 9. If there were 75 brigands, how many highway robbers were there?
9. Write in scientific notation: 0.000345
10. Find the volume of the rectangular solid shown below on right.



### Week #2

1. What is a polynomial with two terms called?
2. Solve for  $x$ :  $3(1 + 2x) + 7 = -4(x + 2)$
3. Sketch the points  $(-2, 0)$  and  $(4, 2)$ , and draw the line that goes through them. Then calculate the slope of the line.
4. Use unit multipliers to convert 2 miles to centimeters.
5. Use the Pythagorean Theorem to find the missing side of the triangle.

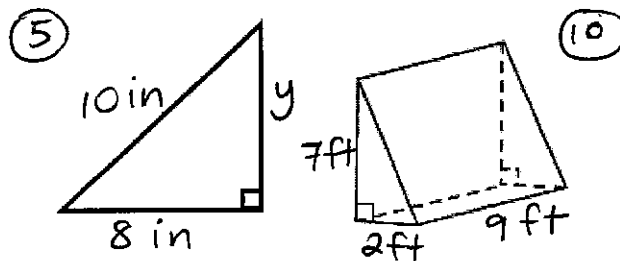


6. Evaluate:  $a^2 - a^3 - a^4$  if  $a = -2$
7. Find a number such that 13 less than twice the number is 137.
8. The ratio of those who stayed awake to those who dozed off was 5 to 18. If 125 stayed awake, how many dozed off?
9. Write in scientific notation: 54,000,000

10. Find the surface area of the rectangular prism shown in number 10 of week 1.

Week #3

1. What is a polynomial with three terms called?
2. Solve for  $x$ :  $2(3x - 5) = 7x + 2$
3. Sketch the points  $(2, 3)$  and  $(4, -1)$ , and draw the line that goes through them. Then calculate the slope of the line.
4. Use unit multipliers to convert 150 square feet to square inches.
5. Use the Pythagorean Theorem to find the missing side of the triangle shown below number 10.
6. Simplify:  $-3^2 + (-3)^3 - 3^0 - |-3 - 3|$
7. Find a number such that if 5 times the number is decreased by 14, the result is twice the opposite of the number.
8. If 25 is increased by 140 percent, what is the result?
9. Write two million in scientific notation.
10. Find the volume of the triangular solid shown below on right.

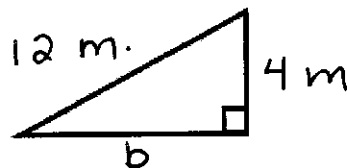


Week #4

1. Add. Write the answer in descending order of the variable.

$$(3x^2 + 6x + 5) + (-2x^2 - x - 12)$$

2. Solve for  $p$ :  $3(p - 2) = p + 7$
3. Sketch the points  $(-1, 1)$  and  $(4, 7)$ , and draw the line that goes through them. Then calculate the slope of the line.
4. Use unit multipliers to convert 40 cubic meters to cubic centimeters.
5. Use the Pythagorean Theorem to find the missing side of the triangle.



6. Simplify:  $-3^2 + (-6)^2 - \sqrt[4]{16} + |2 - 7|$

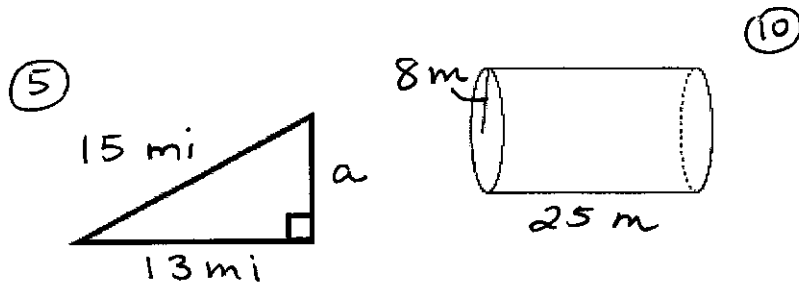
- If the product of a number and 4 is decreased by 12, the result is twice the opposite of the number. Find the number.
- The store owner gave a 35 percent discount, yet Joe still had to pay \$247 for the camera. What was the original price?
- Write 1.5 billion in scientific notation.
- Find the surface area of the triangular prism in number 10 of week 3.

### Week #5

- Add. Write the answer in descending order of the variable.

$$-(4x^3 - 3x + 7) + (2x^3 + 5)$$

- Solve for a:  $4(a - 2) - 4a = -(3a + 2)$
- Graph  $y = \frac{1}{2}x + 3$
- Convert 1400 cubic meters to liters.
- Use the Pythagorean Theorem to find the perimeter of the triangle shown below number 10.
- Expand by using the Distributive Property:  $x^0y^5(y^{-5} - 2y^7x^5)$
- What decimal part of 25 is 1.25?
- Rubella found 60 escargots in the dell. This was only 80 percent of her largest find. What was the size of her largest find?
- Write  $71 \times 10^3$  in scientific notation.
- Find the volume of the cylinder shown below on right.



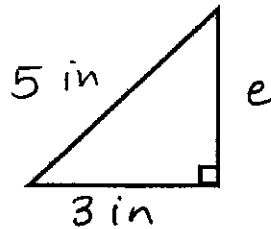
### Week #6

- Multiply. Write the answer in descending order of the variable.

$$3x(x - 5)$$

- Solve for y:  $2\frac{1}{3}y + 5 = 19$
- Graph  $y = -\frac{1}{3}x - 2$
- Use unit multipliers to convert 1,000,000 cubic centimeters to cubic kilometers.

5. Use the Pythagorean Theorem to find the perimeter of the triangle.



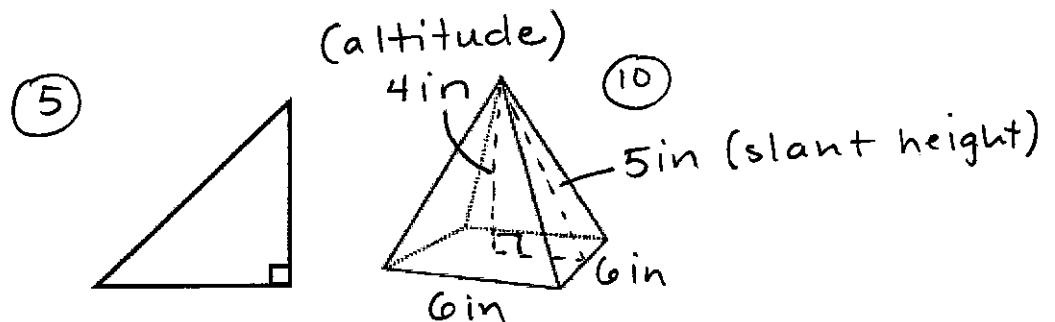
6. Expand using the Distributive Property:  $p^0x^2y(x^3y^1 - 3x)$
7.  $2\frac{1}{9}$  of what number is 76?
8. If \$10,000 is deposited into an account that receives  $5\frac{1}{2}$  percent interest compounded annually, how much money will be in the account after 3 years?
9. Simplify:  $(1.8 \times 10^3) \times (3 \times 10^{-10})$
10. Find the surface area of the cylinder in number 10 of week 5.

Week #7

1. Multiply. Write the answer in descending order of the variable.

$$(2x - 2)(x + 4)$$

2. Solve for p:  $-5\frac{1}{2} + 2\frac{2}{5}p = 7\frac{1}{4}$
3. Graph  $y = 2x - 1$
4. Use unit multipliers to convert 10,500 cubic meters to millimeters.
5. Classify the triangle by angles and sides of the triangle shown below number 10.
6. Simplify:  $(-5)^{-2}$
7. 1.025 of 50 is what number?
8. The ratio of azure to teal stones was 9 to 7. If there were 1600 stones total, how many were teal?
9. Solve for y:  $\frac{1}{8}y + 10 = 14\frac{1}{4}$
10. Find the volume of the pyramid shown below on right.

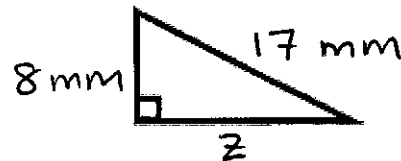
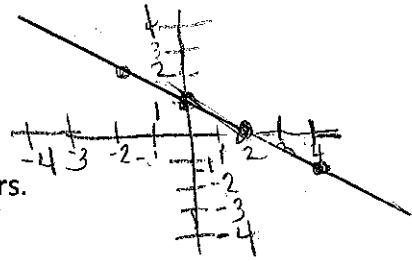


Week #8

1. Divide. Write the answer in descending order of the variable.

$$(3x^3 + 6x^2 - 3x) \div 3x$$

2. Solve for m:  $m - 0.4m + 1.5 = 5.7$
3. Write the equation of the line graphed below.
4. Use unit multipliers to convert 1000 cubic feet to cubic centimeters.
5. Classify the triangle by angles and sides.



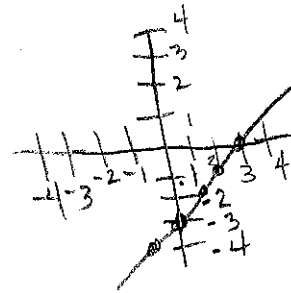
6. Simplify:  $\frac{1}{(-4)^{-3}}$
7.  $2\frac{5}{8}$  of 32 is what number?
8. The receipts for the day totaled \$5200. This was only three fifths of the money needed to pay the bills. How much money was needed to pay the bills?
9. Simplify:  $(1.8 \times 10^8) \times (2 \times 10^{-5})$
10. Find the surface area of the pyramid in number 10 of week 7.

### Week #9

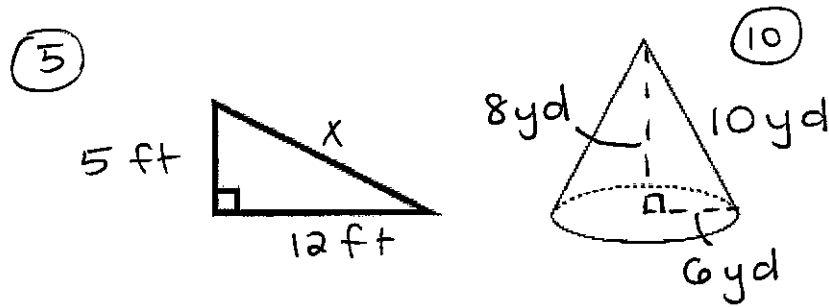
1. Divide. Write the answer in descending order of the variable.

$$(8a^4 - 4a^3 + 12a^2) \div (4a^2)$$

2. Solve for n:  $0.8n + 0.4n = 4.8$
3. Write the equation of the line graphed below.
4. Use unit multipliers to convert 3 miles to feet.
5. Find the missing angle in the triangle shown below number 10.
6. Simplify:  $-4^{-2}$
7. Find a number such that if 3 times the number is decreased by 15, the result is twice the opposite of the number.
8. Four fifths of the bees were not in the hive. If 1350 bees were in the hive, how many were not in the hive?
9. Solve for x:  $0.3 + 0.06x = 6.9$



10. Find the volume of the cone shown below on right.



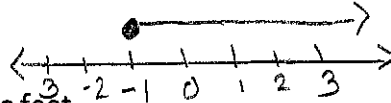
Week #10

1. Multiply. Write the answer in descending order of the variable.

$$(x^3 - 2x^2 + 4)(x - 6)$$

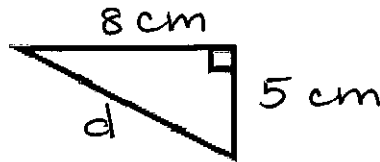
2. Solve for y:  $4\frac{1}{2}y - \frac{1}{6} = 1\frac{1}{3}$

3. Write the equation of the line graphed below.



4. Use unit multipliers to convert 1560 cubic yards to cubic feet.

5. Find x.



6. Simplify:  $-(-4)^{-3}$

7. Twice a number is 36 less than -104. Find the number.

8. Jon uses 7 sticks of charcoal for every 3 drawings he creates. How many drawings can he create with 23 sticks of charcoal?

9. Solve for x:  $3(x - 2) + (2x + 5) = x + 7$

10. Find the surface area of the cone in number 10 of week 9.