

### Math 8 Readiness - Summer Work

Your work will be collected. Keep your work neat. When you do work on a piece of paper, always start with writing the problem.

*Simplify using the Order of Operations. Show all steps.*

Need help? Watch a video. Click here - <https://youtu.be/dAgfnK528RA>.

1.  $3(1 + 2) - 6 + 2(3)$

2.  $10 + \frac{9}{3} \cdot 3 + 2$

3.  $3^3 + 5^2$

4.  $(7^2 - 9) \cdot 2$

5.  $3^2 + 7(5 - 3) - 1$

*Simplify showing all steps. (Rewrite any improper fraction answers as a mixed number).*

Need help? Watch a video. Click here - <https://youtu.be/5juto2ze8Lg>

6.  $\frac{1}{2} + \frac{2}{5}$

7.  $\frac{3}{5} - \frac{1}{12}$

8.  $\frac{2}{3} \cdot \frac{5}{6}$

9.  $\frac{3}{4} \div \frac{1}{2}$

10.  $\frac{2}{3} + \frac{1}{2} \cdot \frac{1}{4}$

*Simplify showing all steps.*

Need help? Watch a video.

Click here - [https://youtu.be/\\_BgbIvF90UE](https://youtu.be/_BgbIvF90UE) for addition/subtraction.

Click here - [https://youtu.be/K\\_tPbVPfHgk](https://youtu.be/K_tPbVPfHgk) for multiplication/division.

11.  $12(-5)$

12.  $-36 + (-15)$

13.  $24 - 32$

14.  $-90 \div (-9)$

15.  $-15 - (-6)$

16.  $22 + (-8)$

17.  $(-3)^2 + 8 - 10(-2)$

*Simplify showing all steps.*

Need help? Watch a video. Click here. <https://youtu.be/DKC74YKJpNY>

18.  $2x + 3 - x$

19.  $2y + 3y - 2 + 5$

20.  $3x + 2y - 5 + 3y - 2x$

21.  $3xy + 2x + 5y - x$

22.  $3(x + 1) - 2x$

23.  $x + x + x + y + y$

24.  $6x + 8x - 10 - x + 12$

Evaluate the expression for the given values. Show all steps.

Confused? Watch this video. [https://youtu.be/OF2GtlinL\\_s](https://youtu.be/OF2GtlinL_s)

25.  $x + y - z$  for  $x = -3$ ,  $y = 2$ , and  $z = -9$

26.  $2x + 2y$  for  $x = -2$ ,  $y = 5$

27.  $xy - 3x$  for  $x = 4$ ,  $y = -8$

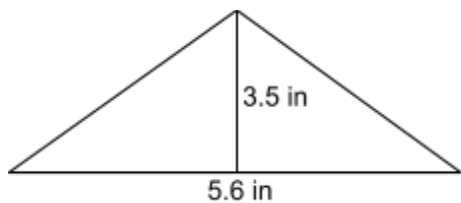
28.  $xyz$  for  $x = 2$ ,  $y = 6$ , and  $z = -2$

29.  $3xy^2$  for  $x = 5$  and  $y = -2$

Find the area of the triangle showing all work.

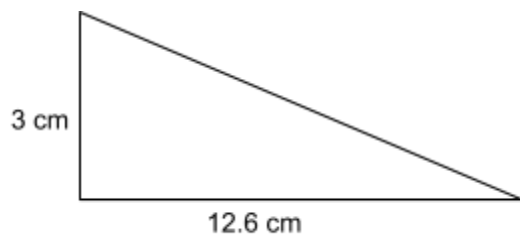
Need help? Watch this video. <https://youtu.be/xCdxURXMdFY>

30.



A = \_\_\_\_\_

31.

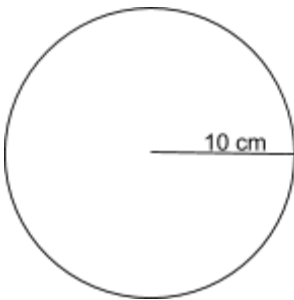


A = \_\_\_\_\_

Identify the diameter of the circle. Then find the circumference. Show all steps.

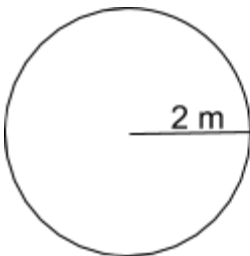
Need help? Watch this video. <https://youtu.be/O-cawByg2aA>

32.



$d =$  \_\_\_\_\_       $C =$  \_\_\_\_\_

33.

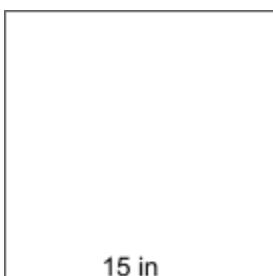


$d =$  \_\_\_\_\_       $C =$  \_\_\_\_\_

Find the perimeter and area of the square. Show all work.

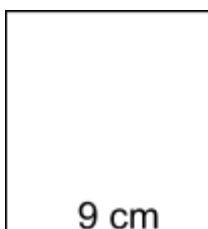
Need help? Watch this video. <https://youtu.be/AAY1bsazcgM>

34.



$p =$  \_\_\_\_\_       $A =$  \_\_\_\_\_

35.



$p =$  \_\_\_\_\_       $A =$  \_\_\_\_\_