If $v = \{X: -2 < X \leq 16\}$

1) is -2 a part of this set?

2) is -1 a part of this set?

3) is 0 a part of this set?

4) is 16 a part of this set?

5) List all of the subsets of {-1,0,1}

5) List all of the subsets of {-1,0,1}

{}
{-1}
{0}
{1}
{-1,0}
{-1,1}
{1,0}
{-1,0,1}

Let A = {3,5,7,11,13}, B = {2,4,6,8,10,12,14,16},
C = {1,2,3,4,5,6,7,8,9,10,11,12}

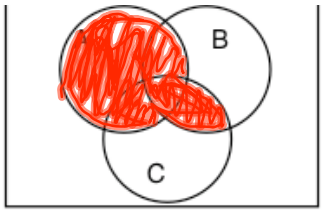
6) List $A \cup B$ {2,3,4,5,6,7,8,10,11,12,13,14,16}

7) List $A \cup C$ {1,2,3,4,5,6,7,8,9,10,11,12,13}

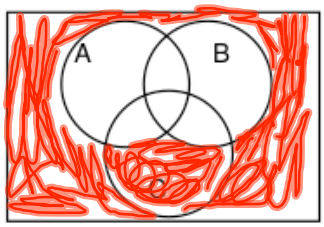
8) List $B \cap C$ {2,4,6,8,10,12}

9) List $A \cap B$ {}

10) Shade the area in the venn diagram represented by $A \cup (B \cap C)$



11) Shade the area in the venn diagram represented by $\overline{A} \cap \overline{B}$



12) Write $3.\overline{7}$ as a ratio of two integers. (show all work.)

$$10x = 37.\overline{7}$$
$$-\quad x = 3.\overline{7}$$
$$9x = 34$$
$$\frac{9x}{9} = \frac{34}{9}$$
$$x = \frac{34}{9}$$

13) Write $2.\overline{19}$ as a ratio of two integers. (show all work.)

$100x = 219.\overline{19}$

$-x = -2.19$

$99x = 217$

$\frac{99x}{99} = \frac{217}{99}$

$x = \frac{217}{99}$

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Pre-Opportunity for chapter 9

14) Write 1.56 as a ratio of two integers. (show all work.)

15) Write $5.2\overline{76}$ as a ratio of two integers. (note that the 2 is not repeating show all work.)

$x = 5.2\overline{76}$

$1000x = 5276.\overline{76}$

$-\ 10x = 52.\overline{76}$

$990x = 5224$

$\frac{990x}{990} = \frac{5224}{990}$

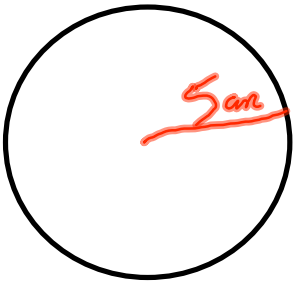
$x = \frac{5224}{990}$

16) Find the area of a circle with a radius of 5 cm. (show all work.)

$A_o = \pi r^2$

$= \pi 5^2$

$A_o = 25\pi \text{ cm}^2$

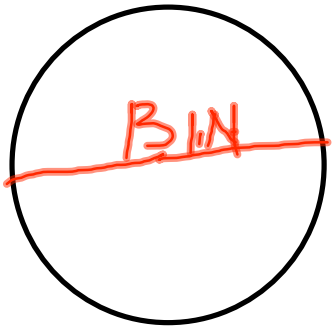


17) Find the area of a circle with a diameter of 13 inches. (show all work.)

$A_o = \pi r^2$

$= \pi (6.5)^2$

$A_o = 42.25\pi \text{ in}^2$

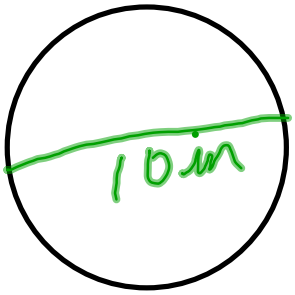


18) Find the area of a circle with a diameter of 10 inches. (show all work.)

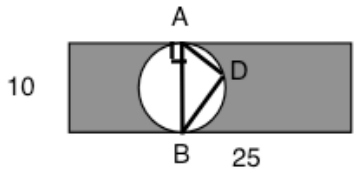
$A_o = \pi r^2$

$A_J = \pi 5^2$

$A_J = 25\pi in^2$



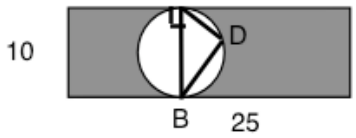
19) The circle fits exactly in the box shown. Find the area of the shaded region.



Area of the square = 10 X 25 = 250 units^2

Area of the circle = $\pi \cdot 5^2 = 25\pi$

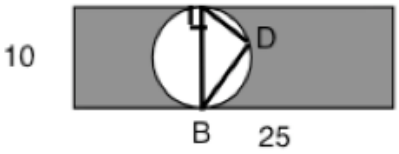
Area of shaded region = $250 - 25\pi =$
$250 - 78.5$
171.5 units^2



20) Find the measure of Angle ADB above. (Chapter 9.4)

90˚ (see chapter 9.4 is you don't understand this one.)

21) What is the radius of the circle in #19?



5 units

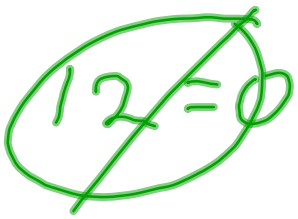
22) Solve for x: $(x + 4)(x - 3)=0$

$x+4=0$ $\quad$ $x-3=0$

$-4 \quad -4$ $\quad$ $+3 \quad +3$

$x = -4$ $\quad$ $x = +3$

23) Solve for x: $12(x - 3)(x + 45) = 0$



$x - 3 = 0$

$+3 \quad +3$

$x = 3$

$x + 45 = 0$

$-45 \quad -45$

$x = -45$

24) Solve for x: $12x(x - 3)(x + 45) = 0$

$\frac{12x}{12} = \frac{0}{12}$ $\quad x - 3 = 0$ $\quad x + 45 = 0$

$+3 \quad +3$

$x = 0$ $\quad x = 3$ $\quad x = -45$

25) Solve for x: $(2x - 8)(x + 4) = 0$

$2x - 8 = 0$

$+8 \quad +8$

$2x = 0$

$\frac{2x}{2} = \frac{0}{2}$

$x = 0$

$x + 4 = 0$

$-4 \quad -4$

$x = -4$

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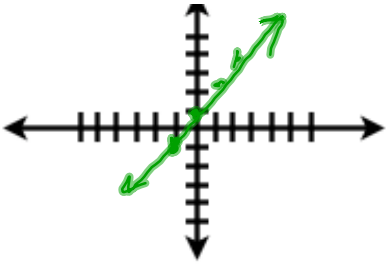
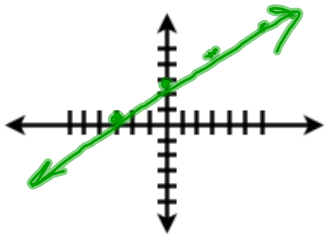
26) $y = \frac{3}{2}x + 1$



x	-1	0	1	2
y	$-\frac{1}{2}$		1	$2\frac{1}{2}$	4

27) $y = \frac{2}{3}x + 3$

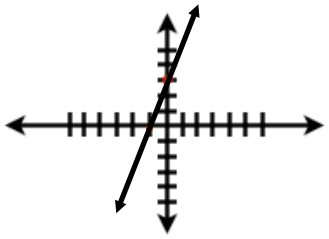


I choose these

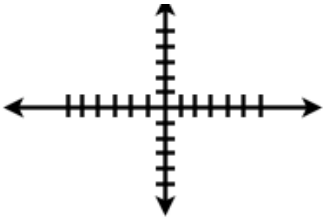
x	-3	0	3	6
y	1	3	5	7

I calculate these

28) $y = 3x + 3$



29) $y = -3x - 3$



20) $y = -\frac{5}{3}x - 3$