

1) $X = \text{LOUCHARTS MEAL}$ $X + \frac{1}{2}X + 2X = 28$ $X = 8$

TAX = $(8)(.06) = .48$ TIP = $(8)(.17) = 1.36$

TOTAL $8 + .48 + 1.36 = \boxed{\$9.84}$

2) AREA $\frac{25\pi}{5} = \frac{225\pi}{x}$ $\therefore x = \frac{45}{4}$

$\left(\frac{45}{4} - \frac{15}{2}\right) = \boxed{\$3.75}$

DIAMETER $\frac{10}{5} = \frac{15}{y}$ $\therefore y = \frac{15}{2}$

3) SUM OF PRIME FROM 25 TO 50 = 228 (29, 31, 37, 41, 43, 47)

SUM FROM 25 TO 50 = $\frac{26(25+50)}{2} = 975$ THEREFORE

SUM OF COMPOSITE FROM 25 TO 50 = $(975 - 228) = 747$

ANSWER = $(228)(747) = \boxed{170,316}$

4) $\boxed{419}$ FIND LCM OF PRODUCT OF NUMBERS

$2 \cdot 3 \cdot 4 \cdot 5 \cdot 6 \cdot 7 = 2 \cdot 3 \cdot 2^2 \cdot 5 \cdot 2 \cdot 3 \cdot 7 = 2^2 \cdot 3 \cdot 5 \cdot 7 = 420$

THEN SUBTRACT 1 = 419

5) PATTERN 1-700, 2-600, 3-500, 4-400, 5-300, 6-200, 7-100

$\boxed{28}$

6) $\frac{2861}{7534}$

7) $\frac{(.24)(60)}{x} = .57$

$x = \frac{480}{19}$

$$8) W = \frac{7}{13}(5), L = .76(5) \quad A = LW$$

$$10.23 \text{ Ft}^2$$

$$9) .\bar{1} = \frac{1}{9}, .1\bar{2} = \frac{11}{90}, .12\bar{3} = \frac{111}{900}, .123\bar{4} = \frac{1111}{9000} \quad \text{SUM} = \frac{4321}{9000}$$

$$10) 256 = 2^8 \quad (8+1) \text{ POSITIVE INTEGRAL FACTORS, SUBTRACT}$$

CVT 16 by 16 THEREFORE $\boxed{8}$

ALSO LIST PAIRS $1 \times 256, 256 \times 1, 2 \times 128, 128 \times 2, 4 \times 64, 64 \times 4$

$$11) SA = 2(xy + xz + yz)$$

$$x = .8 \text{ Ft or } 9.6 \text{ in} \quad y = 5 \text{ in} \quad z = 30.48 \text{ cm or } 12 \text{ in}$$

$$2((9.6)5 + (9.6)12 + 5(12)) \approx \boxed{446} \text{ in}^2$$

$$12) (3x^2 + 61x - 6) - (3x^2 + 61x + 6) = \boxed{-12}$$

$$13) 2^4, 3 \cdot 13, 2 \cdot 3 \cdot 13, 2^2 \cdot 3^4$$

$$\text{LCM} = 2^4 \cdot 3^4 \cdot 13 = 16848$$

$$\text{GCF} = 1$$

$$\text{SUM} = \boxed{16849}$$

$$14) \text{ SLOPE OF 2 POINTS } \frac{-9}{7}$$

$$y = \frac{7}{9}x + b$$

$$15) x = -48$$

$$y = -34$$

$$\text{SUM } x+y = \boxed{-82}$$