

Geometry
Measurement
and
Finance

Good luck on your exam!!

GMF
How am I doing?

1. C

$$2. \quad \begin{array}{l} 12.50 \times 8 \\ 100 \end{array} \quad \begin{array}{l} 0.70 \times 78 \\ 54.60 \end{array} \quad 154.60$$

$$3. \quad \begin{array}{l} \text{Euros} \\ \text{CAD} \end{array} \quad \frac{1}{1.580814} = \frac{350}{x}$$

Canada - Cheaper

$$553.28 = x \text{ (Canadian \$)}$$

OR

$$\frac{1}{1.580814} = \frac{x}{550}$$

$$1.580814 x = 550$$

$$x = 347.9 \text{ (euros)}$$

$$D \quad 4 \quad 250\,000 \times 0.142$$

$$= 35\,500$$

$$A \quad 5. \quad 1.54 / 150g \quad 30\% \text{ off} \rightarrow 1.54 \times 0.30 = 0.46$$

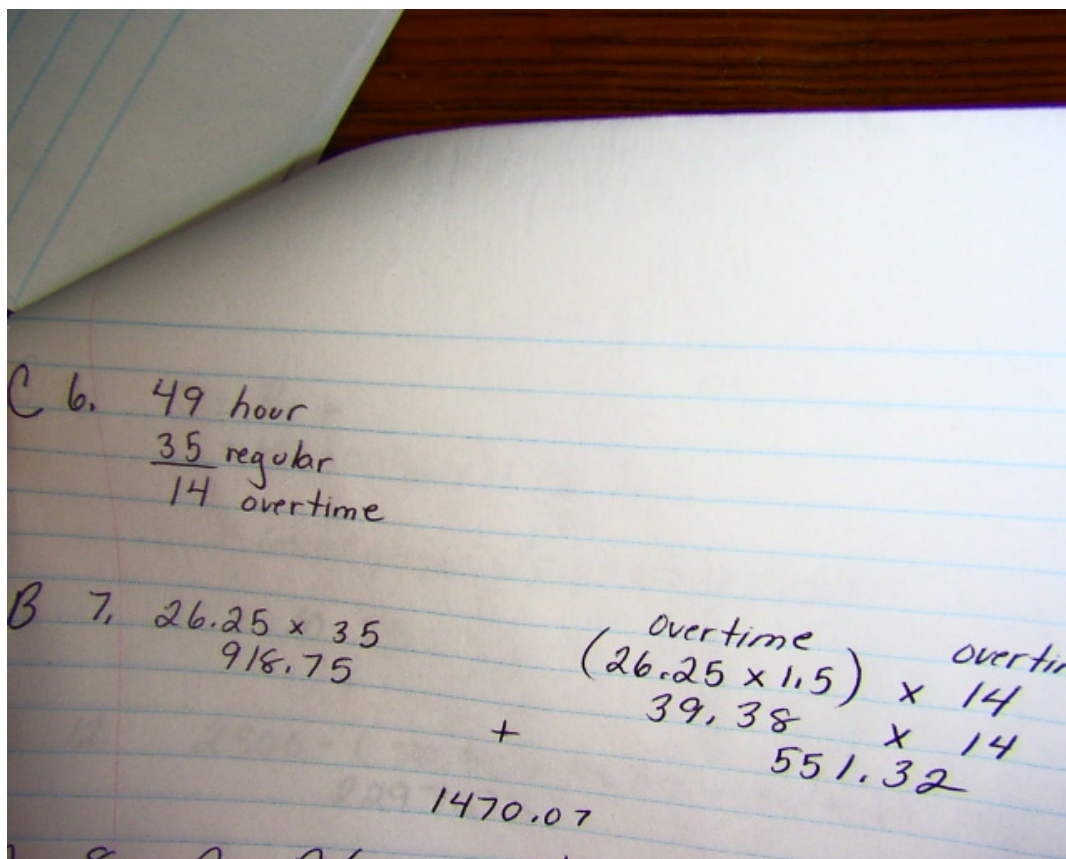
$$1.08 / 150g$$

$$\frac{1.54 - 0.46}{1.08}$$

$$\frac{1.08}{150} = 0.0072/g$$

$$0.0072/g \times 302g$$

$$2.17$$



$$\begin{aligned} 8. \quad A &= P \left(1 + \frac{r}{n} \right)^{nt} \\ &= 6000 \left(1 + \frac{0.04}{2} \right)^{2(5)} \\ &= 6000 \left(1 + 0.02 \right)^{10} & * 7313.97 \\ &= 6000 (1.02)^{10} & - 6000 \\ &= 6000 (1.21899442) & \underline{1313.97} \\ &= 7313.97 \end{aligned}$$

$$9. \quad \$108.56 \times 0.20 = 21.71$$


$$108.56 - 21.71 = 86.85$$

$$86.85 \times 1.13 = 98.14$$

$$\begin{aligned} 10. \quad A &= P \left(1 + \frac{r}{n} \right)^{nt} \\ &= 6650 \left(1 + \frac{0.0434}{4} \right)^{(4)(6)} \\ &= 6650 \left(1 + 0.01085 \right)^{24} \\ &= 6650 \left(1.01085 \right)^{24} \end{aligned} \quad \left\{ \begin{aligned} A &= 6650 (1.2956309) \\ &= 8615.94 \end{aligned} \right.$$

$$\begin{aligned} \text{B 11. } I &= Prt \\ &= 680(0.1965)\left(\frac{28}{365}\right) \\ &= 680(0.1965)(0.076712328) \\ &= 10.25 \end{aligned}$$

$$\text{B 12. } 2500 - (70.50 + 36.47 + 30 + 65.70) \\ 2297.33$$

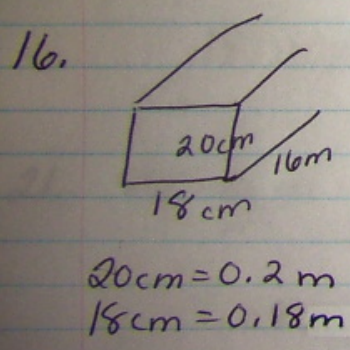
D 13. inches 

14. $605 \text{ yds} \times \frac{3 \text{ feet}}{1 \text{ yds}}$

1815

15. $8 \text{ Km} \times \frac{1 \text{ mi}}{1.6093 \text{ Km}}$
4.97

$12 \text{ Km} \times \frac{1 \text{ mi}}{1.6093 \text{ Km}}$
7.5 mi



$\$ 55 / \text{m}^3$

$$\left. \begin{aligned} V &= l \times w \times h \\ &= 0.2 \times 0.18 \times 16 \\ &= 0.576 \end{aligned} \right\}$$

$\$ 55 \times 0.576$
 $\$ 31.68$

D 17. 15 inches wide $\times \frac{2.54 \text{ cm}}{1 \text{ in}}$
38.1 cm

A 18. $C = \frac{5}{9} (F - 32)$
 $= \frac{5}{9} (15 - 32)$
 $= 0.5 (-17)$
 $= -9.4^\circ \text{ F}$

B 19. $68.7g = \underline{\hspace{2cm}} \text{ oz}$

$$68.7g \times \frac{1 \text{ oz}}{28.4 \text{ g}}$$

2.42 oz

C 20. $72 \text{ Kg} \times \frac{2.2 \text{ lbs}}{1 \text{ Kg}}$ $1000 \div 158.4$

158.4 lbs. 6.3

$\underline{6 \text{ people}}$

A. 21. $400 \text{ Kg} \times \frac{1 \text{ cords}}{370 \text{ Kg}}$

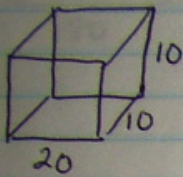
$1.08 \text{ cords} \times \250

270.27

B 22. $V = \frac{\text{area of base} \times h}{3}$

$$= \frac{\pi r^2 \times h}{3}$$
$$= \frac{(3.14)(10)^2 \times 25}{3}$$
$$= \frac{(3.14)(100) \times 25}{3}$$
$$= \frac{(314)(25)}{3}$$
$$= \frac{7850}{3}$$
$$= 2616.67 \text{ cm}^3$$

23.



Top/Bottom

Front/back

Side/Side

$$A = L \times w$$

$$A = L \times w$$

$$= 20 \times 10$$

$$= 10 \times 10$$

$$= 200$$

$$= 100$$

$$\times 2$$

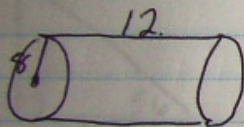
$$\times 2$$

$$400$$

$$200$$

$$+ \quad \underline{\underline{600}}$$

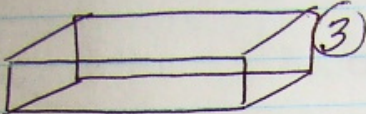
24.



$$SA = 2\pi r^2 + 2\pi r h$$

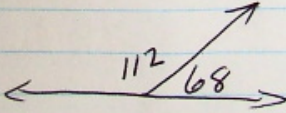
$$2(3.14)(8)(12)$$

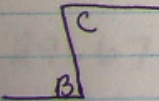
$$602.88$$

25. $20-3-3$ (14)  (34) $40-3-3$ (3)

$V = L \times w \times h$
 $= 14 \times 34 \times 3$
 $= 1428$

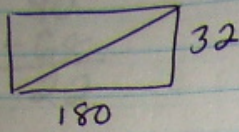
B

C 26. C 

B 27.  Alternate interior

28.

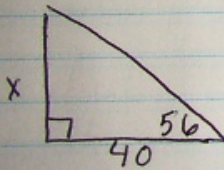
A



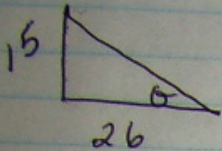
$$\begin{aligned}
 c^2 &= a^2 + b^2 \\
 &= 32^2 + 180^2 \\
 &= 1024 + 32400 \\
 \sqrt{c^2} &= \sqrt{33424} \\
 c &= 182.8
 \end{aligned}$$

182

C 29.



$$\begin{aligned}
 \text{Tan } \theta &= \frac{\text{opp}}{\text{adj}} \\
 \text{Tan } 56 &= \frac{x}{40} \\
 1.4825 &= \frac{x}{40} \\
 x &= 59.3
 \end{aligned}$$

A 30.  $\tan \theta = \frac{\text{opp}}{\text{adj}}$
 $\tan \theta = \frac{15}{26}$
 $\tan \theta = 0.5769$
 $\theta = 30^\circ$

D 31.
$$\begin{array}{r} 3500 \\ - 12 \\ \hline 291.67 \end{array}$$

$$\begin{array}{r} 4500 \\ - 291.67 \\ \hline 4208.33 \end{array}$$

$$\begin{array}{r} 4208.33 \\ \times 0.0495 \\ \hline 208.31 \end{array}$$

B 32.
$$\begin{array}{r} 90 \\ - 68 \\ \hline 22 \end{array}$$