

Formula Test Review → May 24, 2013

① Mean, Median, Mode

Mean - average

(10, 5, 6, 4, 5, 15, 5, 10, 15, 5)

Add all #s together = 80 divide by total # of #s

$$\begin{array}{r} 8 \\ 10 \overline{) 80} \end{array} \quad \text{Mean} = 8$$

Median - middle # - #s are in order from L to G

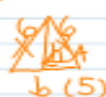
10, 5, 6, 4, 5, 15, 15

4, 5, 5, (6), 10, 15, 15 Median (6)

Mode - most frequently occurring #

10, 5, 6, 4, 5, (5, 15, 15) Mode - (15)

② Area and Perimeter

 b (5)

$$\begin{aligned} A &= b \times h \div 2 \\ A &= 5 \times 4 \div 2 \\ &= 20 \div 2 \\ &= 10 \text{ (u}^2\text{)} \end{aligned}$$

$$\begin{aligned} P &= s + s + s \\ P &= 6 + 6 + 6 \\ &= 17 \text{ (u)} \end{aligned}$$

Square

 2 cm

$$\begin{aligned} A &= s \times s \\ A &= 2 \times 2 \\ &= 4 \text{ (cm}^2\text{)} \end{aligned} \quad \begin{aligned} A &= l \times w \\ A &= 2 \times 2 \\ &= 4 \text{ (cm}^2\text{)} \end{aligned}$$

$$\begin{aligned} P &= (l + w) \times 2 \\ &= (2 + 2) \times 2 \\ &= 4 \times 2 \\ &= 8 \text{ (cm)} \end{aligned}$$

$$\begin{aligned} P &= s + s + s + s \\ &= 2 + 2 + 2 + 2 \\ &= 8 \text{ (cm)} \end{aligned}$$

$$\begin{aligned} P &= 2 \times l + 2 \times w \\ P &= 2 \times 2 + 2 \times 2 \\ &= 4 + 4 \\ &= 8 \text{ (cm)} \end{aligned}$$

$$\begin{aligned} P &= 4 \times s \\ P &= 4 \times 2 \\ &= 8 \text{ (cm)} \end{aligned}$$

Rectangle

 1 cm 3 cm 1 cm

$$\begin{aligned} A &= l \times w \\ &= 3 \times 1 \\ &= 3 \text{ (cm}^2\text{)} \end{aligned}$$

$$P = (l + w) \times 2$$

$$P = s + s + s + s$$

$$P = 2 \times l + 2 \times w$$

$$\begin{aligned} \textcircled{1} P &= (l + w) \times 2 \\ &= (3 + 1) \times 2 \\ &= 4 \times 2 \\ &= 8 \text{ cm} \end{aligned}$$

$$\begin{aligned} \textcircled{2} P &= 2 \times l + 2 \times w \\ &= 2 \times 3 + 2 \times 1 \\ &= 6 + 2 \\ &= 8 \text{ cm} \end{aligned}$$

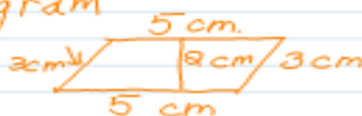
$$\begin{aligned} \textcircled{3} P &= s + s + s + s \\ &= 3 + 1 + 3 + 1 \\ &= 8 \text{ cm} \end{aligned}$$

Area of a Parallelogram

$$A = b \times h$$

$$= 5 \times 2$$

$$= 10 \text{ cm}^2$$



$$P = S + S + S + S$$

$$= 5 + 3 + 5 + 3$$

$$= 16 \text{ cm}$$

$$P = (l + w) \times 2$$

$$= (5 + 3) \times 2$$

$$= 8 \times 2$$

$$= 16 \text{ cm}$$

$$P = 2 \times l + 2 \times w$$

$$= 2 \times 5 + 2 \times 3$$

$$= 10 + 6$$

$$= 16 \text{ cm}$$

Surface Area - area of all of the faces added up together

Rectangular Prism

Triangular Prism

square area formula
rectangle area formula

triangle area formula
rectangle area formula

Volume - base area x height

Rectangular Prism

base - square (area) x height (rectangle)

Triangular Prism

A of triangle x height (rectangle)
($b \times h \div 2$)



$$V = (4 \times 4) \times 6$$

$$= 16 \times 6$$

$$= 96 \text{ cm}^3$$

$$\begin{array}{r} 36 \\ \times 6 \\ \hline 96 \end{array}$$



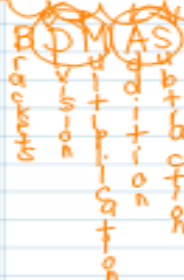
$$V = (6 \times 2 \div 2) \times 10$$

$$= (12 \div 2) \times 10$$

$$= 6 \times 10$$

$$= 60 \text{ cm}^3$$

Order of Operations



$$(4 + 2) \times 6 \div 2 + 8$$

$$= 6 \times 6 \div 2 + 8$$

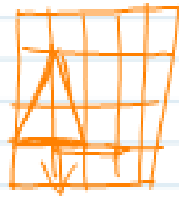
$$= 36 \div 2 + 8$$

$$= 18 + 8$$

$$= 26$$

Transformations

Translation - slide



tracing paper (cut out)

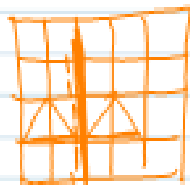
Rotation - turn

- clockwise ↻
- counter-clockwise ↺
- 90° ($\frac{1}{4}$ turn)
- 180° ($\frac{1}{2}$ turn)

tracing paper (cut out)
retrace when done

Reflection - flip

horizontal | ← across →
vertical | up + down
draw your reflection line
mira



The best review for this test is the previous multiple choice EQAO Questions found here:

<http://www.eqao.com/Educators/Elementary/036/BookletsandGuides.aspx?Lang=E&gr=036&yr=12>