

Trinity School of Texas

Department of Mathematics



Summer Math Packet for incoming 6th graders

The attached packet is for all incoming 6th grade students at Trinity School of Texas. It is our belief that practice is needed over the summer break. It is also our belief that this practice should be done over the entire summer, not all at once. As such, we encourage you to work on a page or two at a time.

As a rule, students who complete their summer packet score about 10 – 15 point higher on their first six weeks grade in mathematics.

We will review this material the first two or three weeks of school. Therefore, this is the material that will be on our first test.

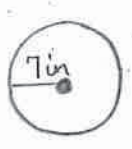
Students who turn in a completed packet will get an extra test grade for the packet at the end of the first six weeks. Students who do NOT complete the packet will not get this extra grade.

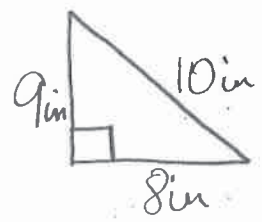
I hope you enjoy your summer. Happy calculating...

a) $\sqrt{16} =$ _____
 b) $\sqrt{81} =$ _____
 c) $\sqrt{121} =$ _____
 d) $\sqrt{20} =$ between _____
 e) $\sqrt{60} =$ between _____
 f) $\sqrt{96} =$ between _____

a) $6 + -7 =$ _____
 b) $-9 + -4 =$ _____
 c) $-20 + 5 =$ _____
 d) $-7 - 5 =$ _____
 e) $-10 - -6 =$ _____
 f) $16 - 19 =$ _____

a) $3\frac{1}{3} + 4\frac{1}{2} =$ _____
 b) $6\frac{2}{5} - 4\frac{3}{4} =$ _____
 c) $10 - 4\frac{3}{7} =$ _____
 d) $7\frac{1}{2} + 4\frac{3}{5} =$ _____
 e) $6\frac{5}{12} + 2\frac{1}{3} =$ _____

Week 1
 r = _____
 d = _____ 
 $A = \pi r^2$
 $A = \pi \cdot r \cdot r$
 A = _____
 $C = \pi d$
 C = _____



$A = \frac{1}{2}bh$
 A = _____
 P = _____

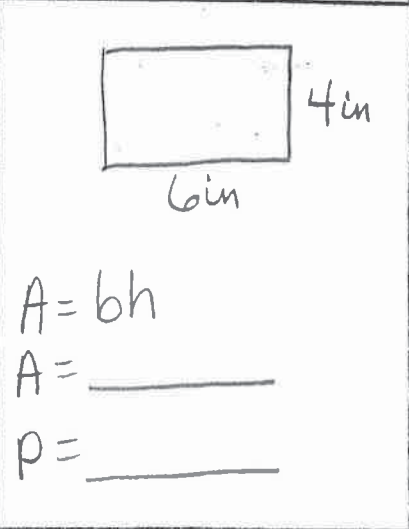
20 24
 ^ ^
 20 = _____
 24 = _____
 GCF = _____
 LCM = _____

6, 9, 4, 8, 4, 5, 10
 put in order _____
 Mean = _____
 Median = _____
 Mode = _____
 Range = _____

Write as a fraction and a decimal.
 12% = _____
 64% = _____

a) $-6 \cdot -3 =$ _____
 b) $5 \cdot -7 =$ _____
 c) $-4 \cdot -5 =$ _____
 d) $-16 \div 2 =$ _____
 e) $75 \div -3 =$ _____
 f) $-45 \div -9 =$ _____

a) $2\frac{1}{2} \cdot 3\frac{1}{5} =$ _____
 b) $4\frac{1}{3} \cdot 1\frac{1}{2} =$ _____
 c) $6\frac{2}{5} \cdot 1\frac{3}{8} =$ _____
 d) $5\frac{1}{3} \cdot 2\frac{1}{4} =$ _____
 e) $3\frac{1}{3} \cdot 2\frac{4}{5} =$ _____



ex) $4.6 \times 10^3 = 4,600$
 4.6
 a) $9.2 \times 10^2 =$ _____
 b) $1.62 \times 10^4 =$ _____
 c) $4.5 \times 10^3 =$ _____
 d) $8.634 \times 10^5 =$ _____

ex.) $\frac{3}{5} = 5 \overline{) 3.0}$
 a) $\frac{3}{4} = 4 \overline{) 3.00}$
 b) $\frac{7}{10} = 10 \overline{) 7}$
 c) $\frac{4}{5} =$ _____

a) $1.63 + 0.1654 =$ _____
 b) $87.6 + 437.63 =$ _____
 c) $73 - 14.89 =$ _____

a) $6\frac{1}{2} \div 1\frac{1}{4} =$ _____
 b) $3\frac{1}{3} \div 2\frac{1}{2} =$ _____
 c) $4\frac{2}{5} \div 1\frac{4}{5} =$ _____
 d) $3\frac{2}{3} \div 2\frac{5}{6} =$ _____


a) $6.3 \times 0.5 =$ _____
 b) $17.4 \times 8 =$ _____
 c) $246.3 \times 0.12 =$ _____

$\sqrt{64} = \underline{\hspace{2cm}}$
 $\sqrt{49} = \underline{\hspace{2cm}}$
 $\sqrt{100} = \underline{\hspace{2cm}}$
 $\sqrt{14} = \text{between } \underline{\hspace{2cm}}$
 $\sqrt{80} = \text{between } \underline{\hspace{2cm}}$

a) $12 + -5 = \underline{\hspace{2cm}}$
 b) $-18 + -2 = \underline{\hspace{2cm}}$
 c) $-16 + -16 = \underline{\hspace{2cm}}$
 d) $9 - 18 = \underline{\hspace{2cm}}$
 e) $5 - -12 = \underline{\hspace{2cm}}$

a) $5\frac{1}{3} + 4\frac{1}{4} = \underline{\hspace{2cm}}$
 b) $3\frac{2}{5} + 3\frac{9}{10} = \underline{\hspace{2cm}}$
 c) $2\frac{2}{3} + 6\frac{8}{9} = \underline{\hspace{2cm}}$
 d) $5\frac{1}{6} - 2\frac{2}{3} = \underline{\hspace{2cm}}$
 e) $9 - 4\frac{1}{3} = \underline{\hspace{2cm}}$

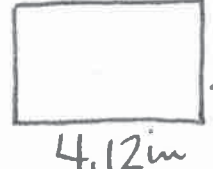
Week 2
 $r = \underline{\hspace{2cm}}$
 $d = \underline{\hspace{2cm}}$
 $A = \pi r^2$
 $A = \pi \cdot r \cdot r$
 $A = \underline{\hspace{2cm}}$
 $C = \underline{\hspace{2cm}}$



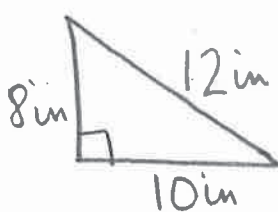
$6.4 \times 10^3 = \underline{\hspace{2cm}}$
 $5.7 \times 10^5 = \underline{\hspace{2cm}}$
 $1.63 \times 10^2 = \underline{\hspace{2cm}}$
 $8.764 \times 10^2 = \underline{\hspace{2cm}}$
 $7.14 \times 10^4 = \underline{\hspace{2cm}}$

Write in Scientific notation
 $2,600 = 2.6 \times 10^3$
 $38,000 = \underline{\hspace{2cm}}$
 $64 = \underline{\hspace{2cm}}$
 $986,000 = \underline{\hspace{2cm}}$
 $1,600,000 = \underline{\hspace{2cm}}$

$15 \quad 30$
 $\wedge \quad \wedge$
 $15 = \underline{\hspace{2cm}}$
 $30 = \underline{\hspace{2cm}}$
 Lcm = $\underline{\hspace{2cm}}$
 GCF = $\underline{\hspace{2cm}}$



$A = \underline{\hspace{2cm}}$
 $P = \underline{\hspace{2cm}}$



$A = \frac{1}{2}bh$
 $A = \underline{\hspace{2cm}}$
 $P = \underline{\hspace{2cm}}$

$7, 8, 9, 12, 7, 6, 7$
 mean $\underline{\hspace{2cm}}$
 median $\underline{\hspace{2cm}}$
 mode $\underline{\hspace{2cm}}$
 range $\underline{\hspace{2cm}}$

Write as a fraction and a decimal.
 $16\% = \underline{\hspace{2cm}}$
 $40\% = \underline{\hspace{2cm}}$

K H D \star dec m
 $4m = \underline{\hspace{2cm}}mm$
 $16km = \underline{\hspace{2cm}}m$
 $600cm = \underline{\hspace{2cm}}m$
 $40mg = \underline{\hspace{2cm}}g$

$\frac{6}{8} = 8 \overline{)6.0}$
 $\frac{9}{10} = \underline{\hspace{2cm}}$
 $\frac{2}{5} = \underline{\hspace{2cm}}$

a) $2\frac{1}{3} \cdot 2\frac{1}{4} = \underline{\hspace{2cm}}$
 b) $4\frac{2}{3} \cdot 1\frac{1}{7} = \underline{\hspace{2cm}}$
 c) $4\frac{1}{6} \div 1\frac{1}{3} = \underline{\hspace{2cm}}$
 d) $5\frac{1}{2} \div 3\frac{1}{4} = \underline{\hspace{2cm}}$

$-6 \cdot -4 = \underline{\hspace{2cm}}$
 $-24 \div 6 = \underline{\hspace{2cm}}$
 $8 \cdot -10 = \underline{\hspace{2cm}}$
 $-14 \cdot -9 = \underline{\hspace{2cm}}$
 $-48 \div -8 = \underline{\hspace{2cm}}$


a) $4.9 \times 0.6 = \underline{\hspace{2cm}}$
 b) $16.2 \times 1.2 = \underline{\hspace{2cm}}$
 c) $9.21 \times 6.2 = \underline{\hspace{2cm}}$
 d) $4.9 \times 6.1 = \underline{\hspace{2cm}}$

$\sqrt{25} =$ _____
 $\sqrt{4} =$ _____
 $\sqrt{144} =$ _____
 $\sqrt{40} =$ between _____
 $\sqrt{93} =$ between _____

a) $-6 + 14 =$ _____
 b) $-3 + -9 =$ _____
 c) $-6 - -12 =$ _____
 d) $9 - 20 =$ _____
 e) $-2 - 13 =$ _____

a) $3\frac{1}{3} + 5\frac{2}{5} =$ _____
 b) $4\frac{3}{5} + 3\frac{1}{2} =$ _____
 c) $6\frac{5}{8} + 9\frac{3}{5} =$ _____
 d) $6 - 3\frac{1}{7} =$ _____
 e) $9\frac{1}{5} - 4\frac{2}{3} =$ _____

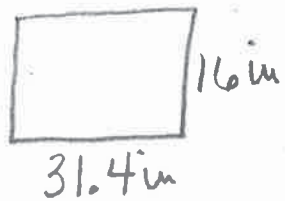
Week 3
 $r =$ _____
 $d =$ _____
 $A =$ _____
 $C =$ _____



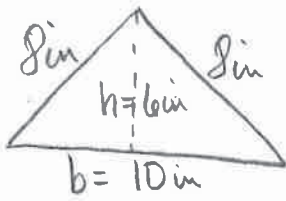
$8.3 \times 10^2 =$ _____
 $0.6 \times 10^4 =$ _____
 $7.9 \times 10^5 =$ _____
 $8.16 \times 10^3 =$ _____
 $1 \times 10^6 =$ _____

Write in Scientific Notation
 a) 16,200 = _____
 b) 420 = _____
 c) 6,230 = _____
 d) 95,000 = _____
 e) 16 = _____

$12 \quad 20$
 $\wedge \quad \wedge$
 $12 =$ _____
 $20 =$ _____
 GCF = _____
 LCM = _____



$A =$ _____
 $P =$ _____



$A = \frac{1}{2}bh$
 $A =$ _____
 $P =$ _____

13, 14, 10, 8, 13, 13
 Mean = _____
 Median = _____
 Mode = _____
 Range = _____

Write as a fraction $\hat{=}$ decimal
 $25\% =$ _____
 $60\% =$ _____

KHD \star dcm
 $1600\text{mg} =$ _____ g
 $14\text{cm} =$ _____ m
 $500\text{mm} =$ _____ m
 $6\text{Km} =$ _____ m
 $0.7\text{Km} =$ _____ cm

$\frac{9}{12} = 12 \overline{)9.00}$
 $\frac{15}{20} =$ _____
 $\frac{4}{5} =$ _____

$5\frac{2}{6} \cdot 3\frac{3}{5} =$ _____
 $4\frac{2}{3} \cdot 1\frac{5}{7} =$ _____
 $3\frac{1}{3} \div 1\frac{1}{6} =$ _____
 $6\frac{1}{5} \div 3\frac{1}{5} =$ _____

$-4 \div -2 =$ _____
 $-6 \cdot 8 =$ _____
 $-9 \cdot -9 =$ _____
 $50 \div -10 =$ _____
 $16 \div -8 =$ _____

a) $3.14 \times 12 =$ _____
 b) $4.3 \times 5.1 =$ _____
 c) $16.2 \times 3.1 =$ _____
 d) $37.3 \div 3 =$ _____


$\sqrt{9} =$ _____
 $\sqrt{121} =$ _____
 $\sqrt{36} =$ _____
 $\sqrt{40} =$ between _____
 $\sqrt{92} =$ between _____
 $\sqrt{70} =$ between _____

a) $-12 + -6 =$ _____
 b) $14 - 20 =$ _____
 c) $-16 - -4 =$ _____
 d) $-16 + 14 =$ _____
 e) $13 - -4 =$ _____

a) $6\frac{1}{2} + 4\frac{2}{5} =$ _____
 b) $3\frac{3}{8} + 4\frac{3}{4} =$ _____
 c) $7\frac{1}{5} + 5\frac{1}{7} =$ _____
 d) $3\frac{9}{10} + 4\frac{1}{4} =$ _____

Week 4

$r =$ _____
 $d =$ _____
 $A =$ _____
 $C =$ _____



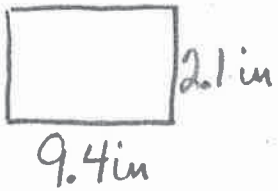
$2.7 \times 10^2 =$ _____
 $3.16 \times 10^4 =$ _____
 $1.4 \times 10^3 =$ _____
 $6.7 \times 10^5 =$ _____
 $8.9 \times 10^2 =$ _____

Write in scientific notation.

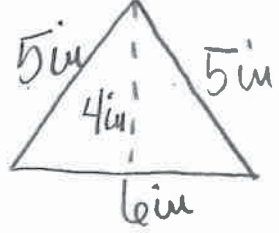
$6,500 =$ _____
 $450 =$ _____
 $163,000 =$ _____
 $19,000 =$ _____
 $26 =$ _____

40 30
 \wedge \wedge

$40 =$ _____
 $30 =$ _____
 GCF = _____
 LCM = _____



$A =$ _____
 $P =$ _____



$A =$ _____
 $P =$ _____

$16, 15, 14, 30, 20$

Mean = _____
 Median = _____
 Mode = _____
 Range = _____

Write as a fraction and a decimal

$80\% =$ _____
 $66\% =$ _____

$700 \text{ mg} =$ _____ g
 $16 \text{ cm} =$ _____ mm
 $1400 \text{ m} =$ _____ km
 $4 \text{ L} =$ _____ mL
 $13,000 \text{ mL} =$ _____ L
 $4.6 \text{ m} =$ _____ cm

$\frac{3}{8} =$ $\overline{13.00}$
 $\frac{1}{4} =$ _____
 $\frac{5}{12} =$ _____

$2\frac{3}{4} \cdot 1\frac{1}{3} =$ _____
 $5\frac{3}{5} \cdot 1\frac{1}{4} =$ _____
 $4\frac{5}{6} \div 1\frac{2}{3} =$ _____
 $5\frac{1}{8} \div 4\frac{3}{4} =$ _____

$-5 \cdot -6 =$ _____
 $-3 \cdot -3 \cdot -2 =$ _____
 $-24 \cdot 3 =$ _____
 $48 \div -6 =$ _____
 $-51 \div -3 =$ _____
 $-16 \div 8 =$ _____

a) $6.11 \times 4.5 =$ _____
 b) $8.06 \times 12 =$ _____
 c) $4.362 \times 5.1 =$ _____

Add, Sub, Mult., Div.

$3\frac{1}{3} \square 2\frac{3}{5}$

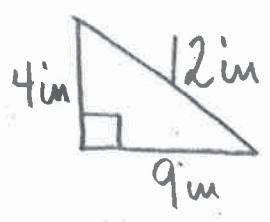
Add= _____
Sub= _____
Mult.= _____
Div.= _____

9, 8, 4, 8, 6, 10, 8

Mean= _____
Median= _____
Mode= _____
Range= _____

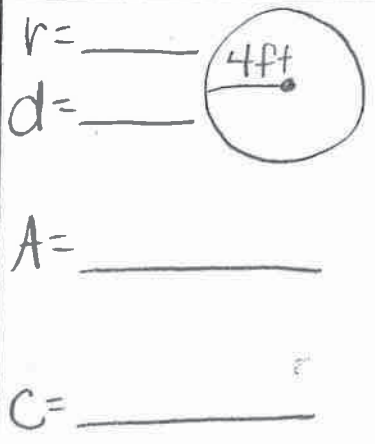
$-3 \cdot -2 \cdot 5 =$ _____
 $-12 \div -2 =$ _____
 $6 \cdot -3 =$ _____
 $-4 \cdot -9 =$ _____
 $-10 \div 2 =$ _____
 $16 \div -4 =$ _____

Week 3
 $\sqrt{10}$ = between _____
 $\sqrt{16}$ = _____
 $\sqrt{48}$ = between _____
 $\sqrt{100}$ = _____
 $\sqrt{5}$ = between _____



A= _____
P= _____

8 12
^ ^
8 = _____
12 = _____
GCF = _____
LCM = _____



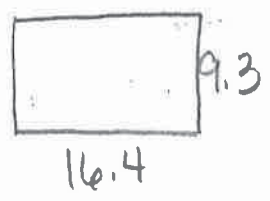
Write as a fraction and a decimal
12% = _____
64% = _____

$-6 + -20 =$ _____
 $18 - -16 =$ _____
 $40 - -20 =$ _____
 $-12 + 30 =$ _____
 $-6 + -5 =$ _____

Add, Sub, Mult, Div.

$4\frac{2}{5} \square 4\frac{1}{4}$

Add= _____
Sub= _____
Mult.= _____
Div.= _____



A= _____
P= _____

$12.4 \square 9.16$
Add= _____
Sub= _____
Mult.= _____

$9 \overline{)4.626}$

$5 \overline{)9.62}$

$8.4 \times 10^3 =$ _____
 $7.63 \times 10^5 =$ _____
 $9.4 \times 10^4 =$ _____
 $8.4 \times 10^2 =$ _____
 $9 \times 10^6 =$ _____

Write in scientific notation.
4,300 = _____
4,900 = _____
60 = _____
12,400 = _____
486 = _____

12m = _____ cm
462cm = _____ m
3Kg = _____ g
400mg = _____ g
1600mm = _____ m

9, 12, 8, 6, 4, 3, 9

Mean _____
Median _____
Mode _____
Range _____

r _____
d _____
A = _____
C = _____



$-12 + 6 =$ _____
 $-7 + -4 =$ _____
 $16 - -4 =$ _____
 $9 - 24 =$ _____
 $-3 - -4 =$ _____
 $-8 + 16 =$ _____

Week 4
 $4.9 \times 10^3 =$ _____
 $9.4 \times 10^2 =$ _____
 $6 \times 10^4 =$ _____
 $8.2 \times 10^6 =$ _____
 $4.5 \times 10^5 =$ _____

$-10 \cdot -4 =$ _____
 $-3 \cdot 6 =$ _____
 $-42 \div 6 =$ _____
 $36 \div -9 =$ _____
 $-5 \cdot -5 =$ _____

10 12
^ ^
10 = _____
12 = _____
GCF = _____
LCM = _____

$4 \frac{2}{3} \square 2 \frac{4}{7}$
Add = _____
Sub = _____
Mult. = _____
Div = _____

Write as a fraction & decimal
10% = _____
35% = _____

Scientific Notation
 $4,340 =$ _____
 $670 =$ _____
 $19 =$ _____
 $20,100 =$ _____
 $62,300 =$ _____

$2 \frac{1}{3} \square 2 \frac{1}{2}$
Add = _____
Sub = _____
Mult = _____
Div. = _____

$36.2 \square 4.8$
Add = _____
Sub = _____
Mult. = _____

$6 \overline{)4.23}$
 $2 \overline{)86.5}$

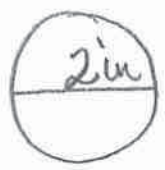
A = _____
P = _____

A = _____
P = _____

9 Kg = _____ mg
31 cm = _____ mm
4 m = _____ mm
400 cm = _____ m
6,240 mg = _____ g

$\frac{5}{25} = 25 \overline{)5.}$
 $\frac{9}{20} = \square$
 $\frac{9}{30} = \square$

$r =$
 $d =$
 $A =$
 $C =$

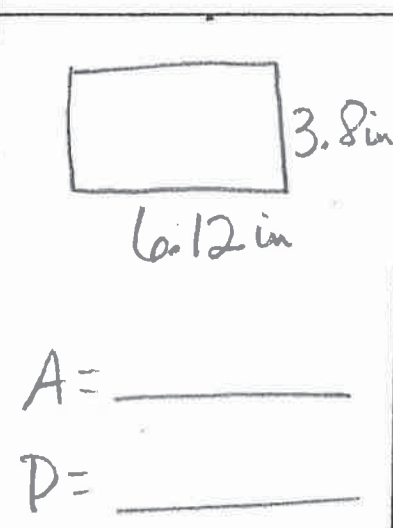


$4 + -40 =$
 $-6 + -10 =$
 $-9 - -6 =$
 $4 - 12 =$
 $-11 - 4 =$

$16 - 8\frac{2}{5} =$
 $3\frac{1}{5} + 4\frac{2}{3} =$
 $4\frac{1}{5} - 2\frac{3}{4} =$
 $8\frac{1}{3} + 10\frac{2}{8} =$

Week 7
 1.62×4.5
 12.6×1.21

Scientific Notation
 $21,000 =$
 $360 =$
 $41,000 =$
 $20 =$
 $1,860 =$



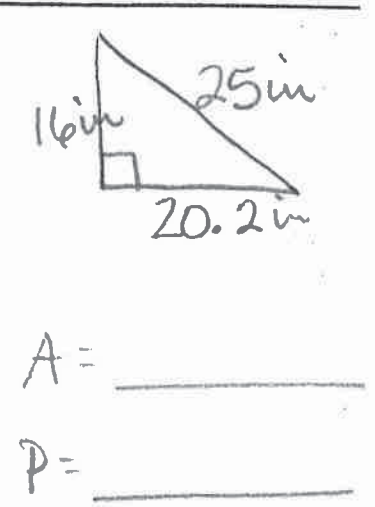
Name the angle

$24m =$ _____ cm
 $81mm =$ _____ m
 $8Kg =$ _____ g
 $4.6g =$ _____ mg
 $6.2cm =$ _____ mm

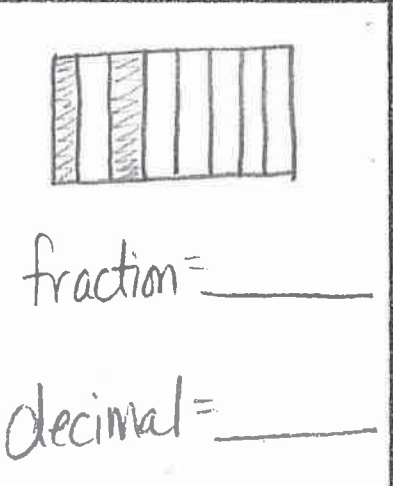
$12, 13, 8, 4, 12$
 Mean _____
 Median _____
 Mode _____
 range _____

$-6 \cdot 6 =$
 $-12 \cdot -4 =$
 $-20 \div -5 =$
 $36 \div -4 =$
 $50 \cdot -4 =$

18 24
 \wedge \wedge
 $18 =$ _____
 $24 =$ _____
 GCF = _____
 LCM = _____



Write as a fraction & decimal
 36% _____
 84% _____



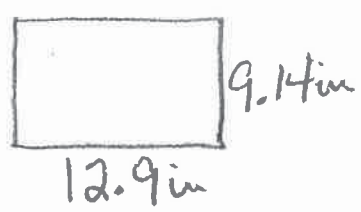
$7.1 \times 10^2 =$
 $8.6 \times 10^4 =$
 $9 \times 10^3 =$
 $4.6 \times 10^5 =$
 $5.36 \times 10^1 =$

$4\frac{1}{3} \cdot 2\frac{2}{3} =$
 $6\frac{2}{5} \div 4\frac{1}{5} =$

Scientific Notation

42,600 = _____
 800 = _____
 70,300 = _____
 26,000 = _____
 23 = _____

$\sqrt{25} =$ _____
 $\sqrt{49} =$ _____
 $\sqrt{20} =$ between _____
 $\sqrt{100} =$ _____
 $\sqrt{40} =$ between _____
 $\sqrt{36} =$ _____



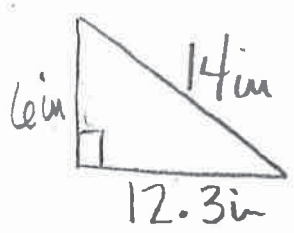
A = _____
 P = _____

Week 8
 $-12 + -6 =$ _____
 $-10 - -7 =$ _____
 $8 - -6 =$ _____
 $-9 - 4 =$ _____
 $16 - 42 =$ _____

r = _____
 d = _____
 A = _____
 C = _____



6 in
 14 in
 12.3 in
 A = _____
 P = _____

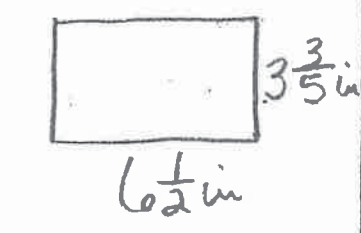


16, 8, 12, 9, 13, 8
 mean _____
 median _____
 mode _____
 range _____

fraction _____
 decimal _____

$4.9 \times 10^2 =$ _____
 $6.43 \times 10^4 =$ _____
 $8 \times 10^6 =$ _____
 $3.06 \times 10^3 =$ _____
 $4.3 \times 10^2 =$ _____
 $9 \times 10^4 =$ _____

Write as a fraction & decimal
 92% _____
 75% _____



A = _____
 P = _____

$-24 \div 2 =$ _____
 $-7 \cdot -8 =$ _____
 $-84 \div -4 =$ _____
 $9 \cdot -10 =$ _____
 $-2 \cdot -3 \cdot -4 =$ _____
 $-5 \cdot 6 \cdot -2 =$ _____

$1.236 \times 4.5 =$ _____
 $16.29 \times 3.7 =$ _____

16m = _____ cm
 5mg = _____ g
 1,200cm = _____ m
 14mm = _____ cm
 12 mL = _____ L
 4KL = _____ L

12 18
 \wedge \wedge
 12 = _____
 18 = _____
 GCF = _____
 LCM = _____

$16.4 + 9.76 + 5 =$ _____
 $8.632 + 14 + 5.6 =$ _____
 $94 - 8.67 =$ _____