

Assessment tomorrow

- Integers
- Patterns from charts
- Expressions
- Create Table of Value/ Analyze graphs
- Circles (Radius, Circumference & Area)
- Area of Triangles & Parallelograms
- Mean/median/mode
- Add/subtract/multiply/Divide Decimals
- Add/Subtract Fractions
- Solve/Write Equations
- coordinates
- probability

Integer \rightarrow positive, negative whole number

-5, -4, -3, -2, -1, 0, +1, +2, +3

Add integers

\rightarrow Both are (+) Ex) $(+3) + (+4)$
 (-) $(+7)$

Just add # part
 Keep sign

$\rightarrow (+) + (-)$ \leftarrow different in sign

Ex) $(+4) + (-10)$

\leftarrow What is the difference between # part
 difference (6)
 Keep sign on larger # part
 (-6)

Subtract integers
 (Rule add opposite)

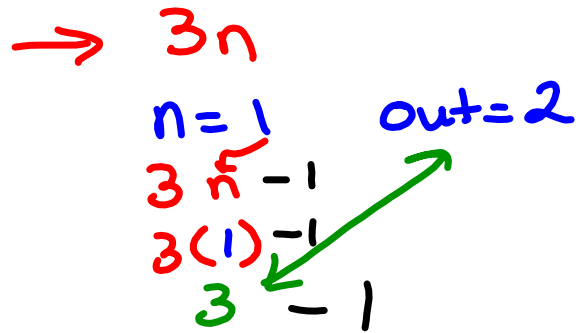
Ex) $(+5) - (-6)$

\downarrow add \downarrow opp
 $(+5) + (+6)$
 $(+11)$

Patterns in Charts

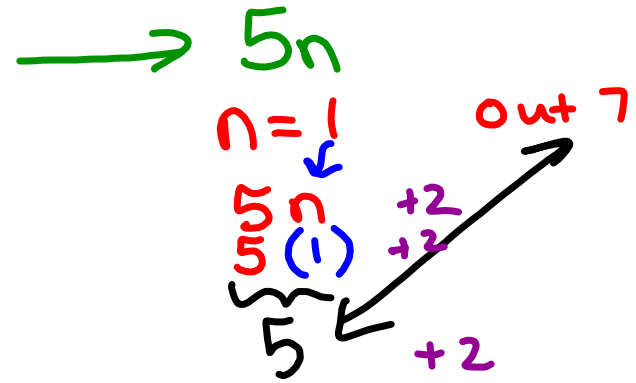
n	Out
1	2
2	5
3	8
4	11
5	14

$3n - 1$



In	Out
1	7
2	12
3	17
4	22
5	27

$5n + 2$



H_n	Out
1	7
2	17
3	27
4	37
5	47

up 10 →

$10n$
 10
 10

out 7

$10n - 3$

$4n + 5$

	out
0	5
1	9
2	13
3	17
4	21
5	25

Red arrows on the left point to the input values 0, 1, 2, 3, 4, 5. A red note "up 4" is next to the output values, indicating the constant difference between terms.

Complete the Chart

$n = 0$

$$4n + 5$$

$$4(0) + 5$$

$$0 + 5$$

$$5$$

$n = 1$

$$4n + 5$$

$$4(1) + 5$$

$$4 + 5$$

$$9$$

$n = 2$

$$4n + 5$$

$$4(2) + 5$$

$$8 + 5$$

$$13$$

Key words

- for each
- for every
- per
- /
- repeated



means
it goes
with
letter

→ means
multiply

adding

Increase
plus
improved



Subtraction

Decrease
minus
reduced

Ex) Susan earns \$5 per hour for babysitting. How much does she earn in 4 hours? Write an expression for "n" hours.

$$5 \times 4 \text{ hours} = 20$$

Write an expression, $5n$

Ex2) Triple a number reduced by 7.

$$3n - 7$$

Add / Subtract Fractions

Must have
Common denominator

$$\overset{\times 7}{\frac{4}{5}} + \overset{\times 5}{\frac{2}{7}} \rightarrow \frac{28}{35} + \frac{10}{35}$$

Now add tops
Keep bottom same

$$\frac{38}{35}$$

$$\frac{3}{35}$$

Ex)

$$\overset{\times 3}{\frac{7}{8}} - \overset{\times 4}{\frac{3}{6}} \rightarrow \frac{21}{24} - \frac{12}{24}$$

$$\frac{9}{24} \begin{matrix} \div 3 \\ \div 3 \end{matrix}$$

$$\boxed{\frac{3}{8}}$$

Ex)

$$3\frac{2}{5} - 1\frac{3}{8}$$

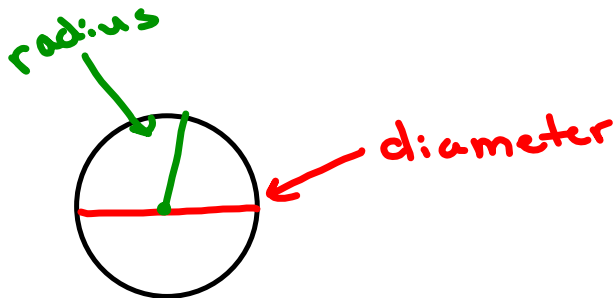
$$\overset{8 \times}{\frac{17}{5}} - \overset{5 \times}{\frac{11}{8}} \rightarrow \frac{136}{40} - \frac{55}{40}$$

$$\frac{81}{40}$$

$$2\frac{1}{40}$$

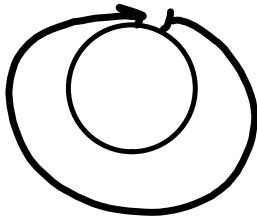
$$\begin{array}{r} 5 \\ 17 \\ \times 8 \\ \hline 136 \end{array}$$

$$\begin{array}{r} 136 \\ - 55 \\ \hline 81 \end{array}$$

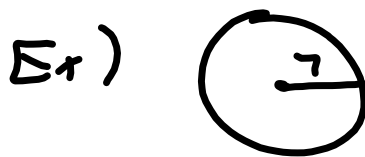


$$r = \frac{d}{2}$$

$$d = 2 \times r$$



$$\begin{aligned} \text{Circumference} &= \pi \times d \\ &= 2\pi r \end{aligned}$$



$$r = 7$$

$$\begin{aligned} C &= 2\pi r \\ C &= 2\pi (7) \\ C &= 14\pi \end{aligned}$$

Area of Circle



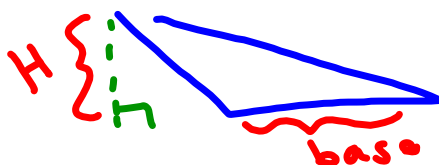
$$\begin{aligned} A_0 &= \pi r^2 \\ &= \pi \times r \times r \end{aligned}$$



$$r = 5$$

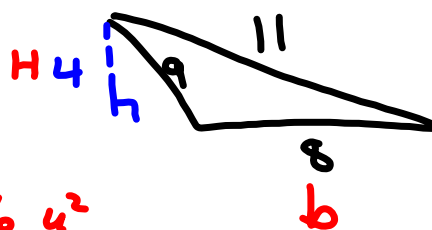
$$A = \pi \times 5 \times 5$$

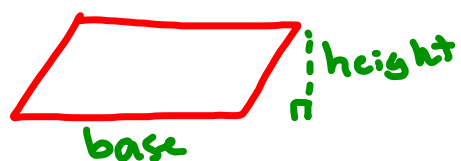
$$25\pi$$



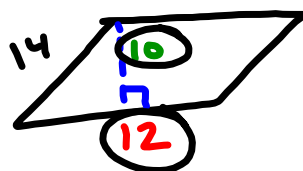
$$A_{\Delta} = \frac{b \times h}{2}$$

$$\frac{4 \times 8}{2} = \frac{32}{2} = 16 \text{ u}^2$$





$$A_{\square} = b \times h$$



Decimals

^{Subtract}
Adding decimal → line up (.)

$$7.2 + 14.76$$

$$\begin{array}{r} 7.20 \\ + 14.76 \\ \hline \end{array}$$