

Evaluate for $G = 7$ $H = -12$ $K = -5$

$$\frac{\sqrt{H+G}}{-G+K-H} = \frac{\sqrt{-12+7}}{-7+(-5)+(+12)} = \frac{\sqrt{-5}}{0}$$

$\sqrt{\text{Negative}}$
is not a real number

$\frac{x}{0}$ is undefined

Restrictions on variables when solving literal equations:

- No negatives under square roots
- Zero can't be a denominator

2. Solve for N .

$$\frac{M+PQ}{N} = \frac{R}{B} \rightarrow N = \frac{B(M+PQ)}{R}$$

State restrictions on the variables:

$$\left. \begin{array}{l} R \neq 0 \\ B \neq 0 \\ N \neq 0 \end{array} \right\} \text{you could write the} \\ \text{Restrictions this way:} \\ \boxed{B, K, N \neq 0}$$

3. Solve for M .

$$\frac{CM}{P-Q} - A = X \rightarrow M = \frac{(X+A)(P-Q)}{C}$$

State restrictions on the variables:

$$\begin{array}{l} C \neq 0 \\ P-Q \neq 0 \rightarrow \text{this could be written} \\ \text{as } P \neq Q \end{array}$$

4. Solve for C .

$$\frac{\sqrt{C+H}-K}{E} = W \rightarrow C = (WE + K)^2 - H$$

State restrictions on the variables:

$$E \neq 0$$

$$C + H \geq 0 \rightarrow \begin{array}{l} C+H \text{ can't be} \\ \text{negative which} \\ \text{means it must} \\ \text{be zero or positive} \\ \hline \geq 0 \end{array}$$

Solve this equation for A .

State restrictions on the variables.

$$\begin{array}{l} AC - AE = N \\ \frac{A(C-E)}{C-E} = \frac{N}{C-E} \end{array} \rightarrow A = \frac{N}{C-E}$$

$$C-E \neq 0$$

Solve for E . State restrictions on the variables.

$$\frac{P}{E} + Y = D$$

$$E = \frac{P}{D-Y}$$

$$E \cdot \frac{P}{E} = (D-Y)E$$

$$\frac{P}{D-Y} = \frac{(D-Y)E}{D-Y}$$

State Restrictions on the variables

$$\begin{array}{l} E \neq 0 \\ D-Y \neq 0 \end{array}$$

Solve for R .

$$\frac{\sqrt{KR-M}}{A} - B = G$$

$$R = \frac{((G+B)A)^2 + M}{K}$$

State restrictions on the variables.

$$\begin{array}{l} K \neq 0 \\ A \neq 0 \\ KR-M \geq 0 \end{array}$$

Hwk #2

Sec 1-3

Page 21

Problems 24, 43, 44, 47, 55, 56, 58, 63, 64

DUE
TOmorrow