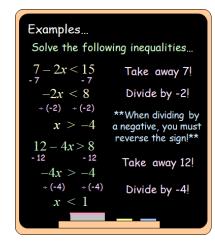
# Outcome 2 - Solving Linear Inequalities

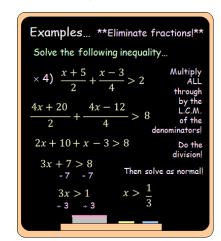
Bronze examples...

## Examples... Solve the following inequalities... 7x - 2 > 19 $8p+5 \le 5p+23$ -5p -5 -5p -5 the numbers on the other! $3p < 18 \quad p < 6$ Divide by 3!

Silver examples

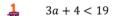


Gold example



#### **Bronze Questions**

Solve the following inequalities...



$$\frac{2}{3}$$
 7c + 5 > 33

$$3t - 3 \le 45$$

$$4s - 2 < 10$$

$$=$$
 8 $l+2 \le l+23$ 

$$8l + 2 \le l + 23$$
  $\clubsuit$   $6k - 5 \ge k - 30$ 

$$3 - 7j - 2 > 3j - 38$$
  $3b - 3 < 3b - 38$ 

Gold Questions



Solve the following inequalities...



$$\frac{1}{4}$$
  $\frac{x}{4} < 3$   $\frac{x+1}{5} > 2$ 

$$\frac{3x+1}{8} \ge 2$$
  $\frac{4x-3}{10} \le \frac{4}{5}$ 

$$\frac{4x-3}{10} \le \frac{4}{5}$$

$$\frac{x}{3} + \frac{x}{2} > 4$$

$$\frac{x}{3} + \frac{x}{2} > 4 \qquad \qquad \frac{x}{9} + \frac{x}{3} \ge 2$$

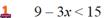
$$2x-1 < \frac{x+5}{2}$$

$$2x-1 < \frac{x+5}{2}$$
  $3x-1 > \frac{4x-13}{3}$ 

$$\frac{x+3}{8} + \frac{x-1}{4} \ge 5$$

### Silver Questions

Solve the following inequalities...



$$2 - 5a > 17$$

$$3 - 3p \ge 20$$

$$4 \quad 7 - 4c \le 31$$

$$4 - 3d < 31$$

$$2 - 9 - 5m > 4$$
  $8 - 4s < 0$ 

$$30-7w<-5$$
  $49$   $7-10n \le -23$ 

#### Bronze Answers

- 1. a < 5</li>
  2. c > 4
  3. t ≤ 6
  4. s < 3</li>

- 5. n≥1 6. p>3 7. l≤3 8. k≥-5
- 7. I ≤ 3 8. k ≥ -5 9. j > -9 10. b < -7

#### Silver Answers

- 1. x > -2
- 3.  $p \le -3$
- 2. a < -34.  $c \ge -6$
- 5. d > -9 6.  $t \le 3$ 7. m < 1 8. s > 2

- 9. w > 5 10.  $n \ge 3$

#### Gold Answers

- 1. x < 12 2. x > 9 3. x ≥ 5 4. x ≤ 11/4
- 5. x > 24/5 6. x ≥ 9/2 7. x < 7/3 8. x > -2

- 9. x≥13 10. x≤13/8