

Name _____ Date _____ Hour _____

THINKING WITH MATHEMATICAL MODELS

INV 2.3 - ACE # 20-23, 26-28, 29-32 pg. 38

For numbers 20-23, refer to the data on page 38.

a) Solve each equation in terms of x . Show your steps.

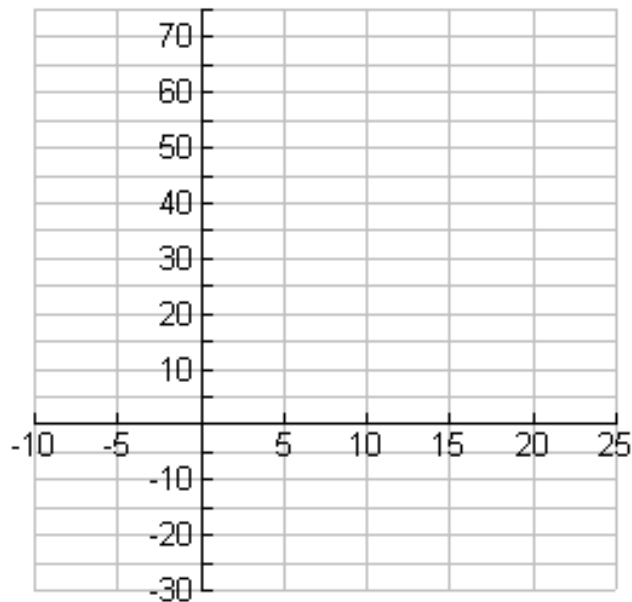
20) $2.5x + 32 = 57$

21) $-24 = 4x - 12$

22) $5x - 51 = 24$

23) $74 = 53 - 7x$

b) Graph and label the associated lines (for example, for $2.5x + 32 = 57$, graph $y = 2.5x + 32$). Label the point that shows the solutions.



For numbers 26 – 28, solve each equation for x. Show your steps.

26.) $5x + 7 = 3x - 5$

27.) $7 + 3x = 5x - 5$

28.) $2.5x - 8 = 5x + 12$

For numbers 29 – 32, find at least three values of x for which the inequality is true.

29.) $4x \leq 12$

30.) $3x < 18$

31.) $4x + 5 \leq 13$

32.) $3x - 9 \leq 18$