

Standard #5 Model Assessment Items

Computational and Procedural Skills

1. Solve the following equations and/or inequalities:

A. $2x+3=15$

F. $-3(x+4) < 9$

B. $\frac{1}{4}x-3=-8$

G. $4x-7 \leq 5x+3$

C. $-4(m+6)=-36$

H. $5(x-1) > \frac{5}{4}x$

D. $\frac{x-8}{4} - 3 = -2$

I. $8-2y \geq 4-y$

E. $5x+2(1-x)=2(2x-1)$

Conceptual Understanding

1. Which is the first incorrect step in the solution of the following inequality?

$$-3(x+4)+2 > 5$$

A. $-3(x+4) > 3$

B. $-3x-12 > 3$

C. $-3x > 15$

D. $x > -5$

2. Justify each step used in solving the given equation:

$$4(x+3)-2(x-1)=30$$

A. $4x+12-2x+2=30$

B. $2x+14=30$

C. $2x=16$

D. $x=8$
