

MASSACHUSETTS MATHEMATICS LEAGUE
OCTOBER 2003
ROUND 3: LINEAR EQUATIONS

ANSWERS

A) _____

B) _____

C) _____

A) Solve for x , leaving the result as a ^{simplified} ~~reduced~~ fraction

$$4(x - 3) + 3(x + 7) - \frac{6}{5}(5x + 10) = \frac{2}{3}(x - 5) - \frac{1}{3}(x + 4)$$

B) The coins from Jeremy's tips total \$3 16. He has two more dimes than quarters, one less than twice as many nickels as dimes, and three more pennies than dimes. How many coins does he have?

C) Karin's exercise route is 4 miles long. She alternates running one-quarter mile at ten mph, and then walking one-half mile at five mph. How many minutes does it take her to complete her route?