

Module 7 Lesson 2

Try This 11 Possible Solutions

TT 11. *Foundations and Pre-calculus Mathematics 10* (Pearson), questions 6, 7, 9, and 12 on pages 401 and 402

6. a) iii

b) i

c) ii

7. a) $2x + 2y = 20$
 $x + 3y = 22$

b)	$2x + 2y = 20$	$x + 3y = 22$
	$2(4) + 2(6) = 20$	$4 + 3(6) = 22$
	$8 + 12 = 20$	$4 + 18 = 22$
	$20 = 20$	$22 = 22$

The solution is verified. The shorter pipe is 4 ft long, and the longer pipe is 6 ft long.

9. a) $3x + y = 17$
 $x = y + 3$

b)	$x + x + x + y = 10 + 5 + 2$	$x = y + 1 + 1 + 1$
	$5 + 5 + 5 + 2 = 17$	$5 = 2 + 1 + 1 + 1$
	$17 = 17$	$5 = 5$

c)	$3x + y = 17$	$x = y + 3$
	$3x + y = 17$	$5 = 2 + 3$
	$3(5) + 2 = 17$	$5 = 5$
	$15 + 2 = 17$	
	$17 = 17$	

12. A sample response is presented.

a) Shen might have been modelling the following problem:

There are a total of 110 coins in the collection with only \$2 and \$1 coins. The total value of the coins is \$160.

b) The variable ℓ represents the number of \$1 coins, and the variable t represents the number of \$2 coins.