***College Algebra, 5e* (Young)**

**Chapter 1 Equations and Inequalities**

1.1 Linear Equations

1) Solve the equation.

-56*x* - 54 = 10 - 60*x*

A)16

B) 64

C) -116

D) 60

Answer: A

Diff: 1 Var: 1

Chapter/Section: Ch 01, Sec 01

Learning Objective: Solve linear equations in one variable.

2) Solve the equation.

25*c* + 2 = 7 + 22*c*

A)9/47

B) 38

C) 5/3

D) 56

Answer: C

Diff: 1 Var: 1

Chapter/Section: Ch 01, Sec 01

Learning Objective: Solve linear equations in one variable.

3) Solve the equation.

5(*x* - 3) - 5 = *x* - 3(*x* - 2)

A) 7/26

B) 6/7

C) 26/7

D) 7/6

Answer: C

Diff: 2 Var: 1

Chapter/Section: Ch 01, Sec 01

Learning Objective: Solve linear equations in one variable.

4) Solve the equation.

(p/5) = (5p/6) + 5

A) -5/4

B) -1/9

C) -9

D) -150/19

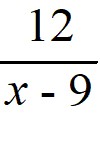
Answer: D

Diff: 2 Var: 1

Chapter/Section: Ch 01, Sec 01

Learning Objective: Solve linear equations in one variable.

5) Specify the values that must be excluded from the solution set.

(19/x) - 1 = 

A) 0 and 9

B) 9

C) 0

D) -9

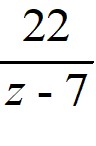
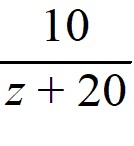
Answer: A

Diff: 1 Var: 1

Chapter/Section: Ch 01, Sec 01

Learning Objective: Solve rational equations that are reducible to linear equations.

6) Specify the values that must be excluded from the solution set.

 - (16/23) = 

A) -20

B) -7 and 20

C) 7 and -20

D) 7, 23, and -20

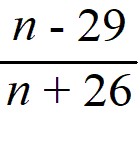
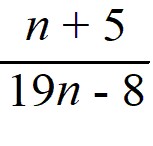
Answer: C

Diff: 1 Var: 1

Chapter/Section: Ch 01, Sec 01

Learning Objective: Solve rational equations that are reducible to linear equations.

7) Specify the values that must be excluded from the solution set.

 - (23/25) = 

A) -26

B) 26 and -19/8

C) -26 and 8/19

D) -26, 25 and 8/19

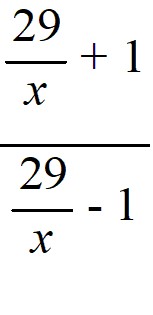
Answer: C

Diff: 2 Var: 1

Chapter/Section: Ch 01, Sec 01

Learning Objective: Solve rational equations that are reducible to linear equations.

8) Specify the values that must be excluded from the solution set.

 = -9

A) 0 and 29

B) 0

C) 29

D) -9

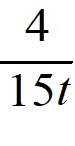
Answer: A

Diff: 2 Var: 1

Chapter/Section: Ch 01, Sec 01

Learning Objective: Solve rational equations that are reducible to linear equations.

9) Solve the equation.

(5/3t) = 5 - 

A) 75/29

B) 21/75

C) 29/75

D) 4/5

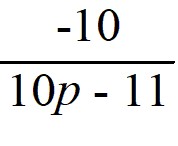
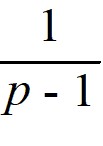
Answer: C

Diff: 2 Var: 1

Chapter/Section: Ch 01, Sec 01

Learning Objective: Solve rational equations that are reducible to linear equations.

10) Solve the equation.

 = 

A) no solution

B) 19/20

C) 21/20

D) 1/20

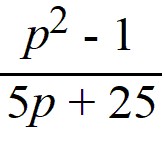
Answer: C

Diff: 2 Var: 1

Chapter/Section: Ch 01, Sec 01

Learning Objective: Solve rational equations that are reducible to linear equations.

11) Solve the equation.

 = (p/5)

A) 1/5

B) 5

C) -5

D) -1/5

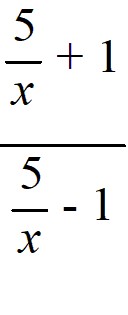
Answer: D

Diff: 2 Var: 1

Chapter/Section: Ch 01, Sec 01

Learning Objective: Solve rational equations that are reducible to linear equations.

12) Solve the equation.

 = 6

A) 1

B) 10

C) 5

D) None of the above

Answer: D

Diff: 3 Var: 1

Chapter/Section: Ch 01, Sec 01

Learning Objective: Solve rational equations that are reducible to linear equations.

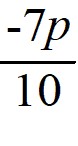
13) Solve 2*n* + 10= 17- 5*n*.

Answer: 1

Diff: 1 Var: 1

Chapter/Section: Ch 01, Sec 01

Learning Objective: Solve linear equations in one variable.

14) Solve (7p/10) =  - 140.

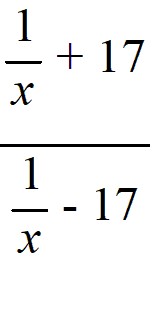
Answer: -100

Diff: 2 Var: 1

Chapter/Section: Ch 01, Sec 01

Learning Objective: Solve linear equations in one variable.

15) Specify any values that must be excluded from the solution set and then solve the equation.

 = 2

Answer: Exclude {0, 1/17}, the solution set is {1/51} or *x* = 1/51

Diff: 3 Var: 1

Chapter/Section: Ch 01, Sec 01

Learning Objective: Solve rational equations that are reducible to linear equations.

16) Solve.

38 - [8 + 12*x* - 15(*x* + 5)] = 3(6*x* + 11) - [8(4*x* - 1) + 2 - 19*x*]

Answer: 41

Diff: 2 Var: 1

Chapter/Section: Ch 01, Sec 01

Learning Objective: Solve linear equations in one variable.

17) When traveling in London, Florence decided to check her e-mail at an internet café. There was a flat charge of $3.00 plus a charge of 19 cents a minute. How many minutes was she logged on if her bill was $5.85?

Answer: 15 minutes

Diff: 2 Var: 1

Chapter/Section: Ch 01, Sec 01

Learning Objective: Solve linear equations in one variable.

18) Solve -8*z =* -80 for *z*.

A) 10

B) 640

C) -88

D) -72

Answer: A

Diff: 1 Var: 1

Chapter/Section: Ch 01, Sec 01

Learning Objective: Solve linear equations in one variable.

19) Solve -12*u =* -3 for *u*.

A) 4

B) 36

C) (1/4)

D) -9

Answer: C

Diff: 1 Var: 1

Chapter/Section: Ch 01, Sec 01

Learning Objective: Solve linear equations in one variable.

20) Solve -8*w* - 8 = 64 for *w.*

A)80

B) -9

C) 48

D) 72

Answer: B

Diff: 1 Var: 1

Chapter/Section: Ch 01, Sec 01

Learning Objective: Solve linear equations in one variable.

21) Solve (1/4)*x* = - (1/2)*x* + 9 for *x.*

A)-12

B) (1/12)

C) 12

D) - (1/12)

Answer: C

Diff: 2 Var: 1

Chapter/Section: Ch 01, Sec 01

Learning Objective: Solve linear equations in one variable.

22) The perimeter, *P*, of a rectangle is the distance around it, and can be found by solving the formula *P* = 2*l* + 2*w*, where *l* is the length and *w* is the width. What is the length of a rectangle whose perimeter is 30 inches and whose width is 3 inches?

A) 15 inches

B) 12 inches

C) 24 inches

D) 10 inches

Answer: B

Diff: 2 Var: 1

Chapter/Section: Ch 01, Sec 01

Learning Objective: Solve linear equations in one variable.

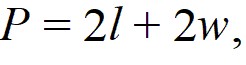
23) Solve 7*q* = 56 for *q.*

Answer: *q* = 8

Diff: 1 Var: 1

Chapter/Section: Ch 01, Sec 01

Learning Objective: Solve linear equations in one variable.

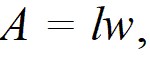
24) The perimeter, *P*, of a rectangle is the distance around it, and can be found by solving the formula ** where *l* is the length and *w* is the width. What is the length of a rectangle whose perimeter is 102 inches and whose width is 23 inches?

Answer: 28 inches

Diff: 2 Var: 1

Chapter/Section: Ch 01, Sec 01

Learning Objective: Solve linear equations in one variable.

25) The area, A, of a rectangle is the amount of two-dimensional space it takes up and can be found by solving the formula ** where *l* is the length and *w* is the width. What is the length of a rectangle whose area is 80 square inches and whose width is 8 inches?

A) 72 inches

B) 64 inches

C) 8 inches

D) 10 inches

Answer: D

Diff: 2 Var: 1

Chapter/Section: Ch 01, Sec 01

Learning Objective: Solve linear equations in one variable.

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