Name: Equivalence of Linear Equations

Chapter: Linear Equations in One Variable

Grade: SSC Grade VIII

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1. The linear equation (8x+3)=(-5x+1) is equivalent to

(i) 
$$(13x+2)=0$$
 (ii)  $(8x+3)=(-5x+3)$  (iii)  $(14x+2)=0$  (iv)  $(8x+3)=(-5x-2)$  (v)  $(12x+2)=0$ 

2. The linear equation (3x+9y+5)=(-4x-y-8) is equivalent to

(i) 
$$(7x+10y+13)=0$$
 (ii)  $(3x+9y+5)=(-4x-3y-8)$  (iii)  $(6x+10y+13)=0$ 

(iv) 
$$(3x+9y+5)=(-4x+y-8)$$
 (v)  $(8x+10y+13)=0$ 

3. Which of the following equations is the same as (-6x-1)=0

(i) 
$$(-6x)=2$$
 (ii)  $(-6x+2)=2$  (iii)  $(-6x+1)=2$  (iv)  $(-6x+1)=(-2)$  (v)  $(-6x+1)=6$ 

4. Which of the following equations is the same as (7x+3)=0

(i) 
$$(7x+1)=(-3)$$
 (ii)  $(7x+1)=(-2)$  (iii)  $(7x+1)=(-1)$  (iv)  $(7x+5)=(-2)$  (v)  $(7x-3)=(-2)$ 

5. Which of the following equations is the same as (-9x+4)=0

(i) 
$$(18x-8)=(-5)$$
 (ii)  $(18x-10)=0$  (iii)  $(18x-6)=0$  (iv)  $(18x-8)=5$  (v)  $(18x-8)=0$ 

6. Which of the following equations is the same as (5x-5)=(-8)

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(i) (5x-2)=(-6) (ii) (5x-3)=(-3) (iii) (5x-4)=(-6) (iv) (5x-3)=(-6) (v) (5x-3)=(-9)
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7. Which of the following equations is the same as (-8x-2)=(-1)

(i) 
$$(-8x-5)=(-4)$$
 (ii)  $(-8x-5)=(-5)$  (iii)  $(-8x-7)=(-4)$  (iv)  $(-8x-5)=(-3)$  (v)  $(-8x-3)=(-4)$ 

8. Which of the following equations is the same as (3x+7)=(-5)

(i) 
$$(-9x-21)=15$$
 (ii)  $(-9x-25)=15$  (iii)  $(-9x-21)=10$  (iv)  $(-9x-17)=15$  (v)  $(-9x-21)=20$ 

9. Which of the following equations is the same as (8x-2)=(-9x-8)

(i) 
$$(8x-3)=(-9x-4)$$
 (ii)  $(8x+2)=(-9x-7)$  (iii)  $(8x+2)=(-9x-1)$  (iv)  $(8x+2)=(-9x-4)$ 

(v) (8x+7)=(-9x-4)

10. Which of the following equations is the same as (8x-9)=(-2x+5)

(i) 
$$(8x-7)=(-2x+3)$$
 (ii)  $(8x-11)=(-2x+4)$  (iii)  $(8x-11)=(-2x+2)$  (iv)  $(8x-15)=(-2x+3)$ 

(v) (8x-11)=(-2x+3)

11. Which of the following equations is the same as 4x = (-5x + 8)

(i) 
$$(-4x)=(5x-8)$$
 (ii)  $(-4x)=(5x-3)$  (iii)  $(-4x+4)=(5x-8)$  (iv)  $(-4x)=(5x-13)$ 

(v) 
$$(-4x-4)=(5x-8)$$

12. Which of the following equations is not the same as (-6x-1)=0(i) (-6x-2)=(-1) (ii) (-6x)=1 (iii) (-6x+2)=(-3) (iv) (-6x+4)=5 (v) (-6x-6)=(-5)13. Which of the following equations is not the same as (7x-9)=0(i) (7x-10)=(-1) (ii) (7x-11)=(-2) (iii) (7x-8)=1 (iv) (7x-13)=4 (v) (7x-7)=214. Which of the following equations is not the same as (-6x-2)=0(i) (12x+4)=0 (ii) (-18x-6)=3 (iii) (-12x-4)=0 (iv) (-30x-10)=0 (v) (24x+8)=015. Which of the following equations is not the same as (-8x+8)=(-7)(i) (-8x+13)=(-2) (ii) (-8x+12)=(-3) (iii) (-8x+4)=(-11) (iv) (-8x+3)=(-12)(v) (-8x+9)=(-8)16. Which of the following equations is not the same as (-2x+1)=5(i) (-2x+6)=10 (ii) (-2x-4)=0 (iii) (-2x-1)=3 (iv) (-2x-3)=9 (v) (-2x+3)=717. Which of the following equations is not the same as (x+8)=4(i) (2x+16)=8 (ii) (-2x-16)=(-8) (iii) (4x+32)=16 (iv) (-3x-24)=(-12) (v) (-5x-40)=(-1)18. Which of the following equations is not the same as (8x+3)=(3x-4)(i) (8x+2)=(3x-5) (ii) (8x+6)=(3x-1) (iii) (8x+4)=(3x-3) (iv) (8x+8)=(3x-9)(v) 8x = (3x - 7)19. Which of the following equations is not the same as (x+8)=(-7x+4)(i) (x+10)=(-7x+6) (ii) (x+5)=(-7x+1) (iii) (x+11)=(-7x+7) (iv) (x+6)=(-7x+2)(v) (x+7)=(-7x+5)20. Which of the following equations is not the same as (2x+3)=(-x-9)(i) (-2x-3)=(-x-10) (ii) (-10x-15)=(5x+45) (iii) (10x+15)=(-5x-45)(iv) (8x+12)=(-4x-36) (v) (6x+9)=(-3x-27)21. Which of the following equations is the same as (9x-8)=0(i) (13x-9)=(-4x+1) (ii) (10x-11)=(-x+3) (iii) (8x-5)=(x-3) (iv) (5x-7)=(4x-1)(v) (10x-11)=(x-3)22. Which of the following equations is the same as (3x+2)=0(i) (11x-3)=(8x-5) (ii) (11x-3)=(-8x+5) (iii) (-4x+11)=(7x-9) (iv) (-5x+7)=(8x-5)

(v) (10x-7)=(-7x+9)

(v) (8x+18)=(4x+1)

23. Which of the following equations is the same as (4x+9)=(-8)

(i) 0=(4x+1) (ii) (8x+12)=(-4x-11) (iii) 6=(4x-5) (iv) (8x+18)=(-4x-17)

| 24. Which of the following equations is the same as $(-x-4)=(-3)$<br>(i) $(-4)=(-x-3)$ (ii) $(-2x)=(x-7)$ (iii) $(-2x)=(-x+1)$ (iv) $(-8)=(-x+1)$ (v) $(-2x-4)=(x-3)$                           |
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| 25. Which of the following equations is the same as $(-x-5)=(-5x-9)$<br>(i) $(-9x-12)=(3x-2)$ (ii) $(7x+2)=(-13x-16)$ (iii) $(-5x-2)=(-x-12)$ (iv) $(-9x-12)=(-13x-16)$<br>(v) $(3x-8)=(-9x-6)$ |
| 26. Which of the following equations is the same as $(8x+4)=(-5x+7)$<br>(i) $(4x+1)=(-x+10)$ (ii) $(12x+7)=(-9x+4)$ (iii) $(7x+3)=(-4x+8)$ (iv) $(9x+5)=(-6x+6)$<br>(v) $(12x+7)=(-x+10)$       |
| 27. Which of the following equations is not the same as $(-3x+7)=0$<br>(i) $(-2x)=(-x+7)$ (ii) $(-6x+3)=(-3x-4)$ (iii) $(-4x+14)=(-x+7)$ (iv) $11=(3x+4)$<br>(v) $(-2x)=(x-7)$                  |
| 28. Which of the following equations is not the same as $(2x+2)=0$<br>(i) $(5x-2)=(-3x+4)$ (ii) $(4x+3)=(2x+1)$ (iii) $(-x+6)=(-3x+4)$ (iv) $(5x-2)=(3x-4)$<br>(v) $1=(-2x-1)$                  |
| 29. Which of the following equations is not the same as $(4x+1)=4$ (i) $(6x+8)=(2x+11)$ (ii) $(2x-6)=(-2x-3)$ (iii) $(13x+3)=(9x+6)$ (iv) $(13x+3)=(-9x+2)$ (v) $(-5x-1)=(-9x+2)$               |
| 30. Which of the following equations is not the same as $(4x-8)=8$ (i) $(2x-9)=(-2x+7)$ (ii) $(6x-7)=(2x+9)$ (iii) $(5x-11)=(-x+11)$ (iv) $(3x-5)=(-x+11)$ (v) $(5x-11)=(x+5)$                  |
| 31. Which of the following equations is not the same as $(3x+5)=(4x-3)$<br>(i) $(4x-4)=(3x+6)$ (ii) $(-6x-3)=(-5x-11)$ (iii) $(2x+14)=(3x+6)$ (iv) $(4x-4)=(5x-12)$<br>(v) $(12x+13)=(13x+5)$   |
| 32. Which of the following equations is not the same as $(9x-5)=(-9x+1)$<br>(i) $(8x-3)=(-10x+3)$ (ii) $(10x-7)=(-8x-1)$ (iii) $(8x-3)=(-8x-1)$ (iv) $(10x-6)=(-8x)$<br>(v) $(8x-4)=(-10x+2)$   |
| 33. Which of the following equations is equivalent to $(-4x-9)=0$   |

35. Which of the following equations is equivalent to (-3x+8)=(9x-3)(i) (-12x)=(-7) (ii) (-12x)=(-15) (iii) (-12x)=(-9) (iv) (-12x)=(-13) (v) (-12x)=(-11)

(i) (-4x)=12 (ii) (-4x)=5 (iii) (-4x)=9 (iv) (-4x)=6 (v) (-4x)=13

(i) (-5x)=(-2) (ii) (-5x)=1 (iii) (-5x)=(-3) (iv) (-5x)=5 (v) (-5x)=4

34. Which of the following equations is equivalent to (-5x+5)=6

36. Which of the following equations is not equivalent to (-4x-2)=0

(i) (-12x)=6 (ii) (-4x)=(-2) (iii) (-4x)=2 (iv) 12x=(-6) (v) 8x=(-4)

37. Which of the following equations is not equivalent to (-3x+2)=9

(i) 3x = (-7) (ii) 12x = (-28) (iii) (-9x) = 21 (iv) (-3x) = 5 (v) 15x = (-35)

38. Which of the following equations is not equivalent to (-5x-4)=(6x+8)

(i) (-11x)=12 (ii) 33x=(-36) (iii) 11x=(-12) (iv) 55x=(-60) (v) (-11x)=16

| Assignment Key |           |           |          |          |           |  |
|----------------|-----------|-----------|----------|----------|-----------|--|
| 1) (i)         | 2) (i)    | 3) (iii)  | 4) (ii)  | 5) (v)   | 6) (iv)   |  |
| 7) (i)         | 8) (i)    | 9) (iv)   | 10) (v)  | 11) (i)  | 12) (iii) |  |
| 13) (iv)       | 14) (ii)  | 15) (v)   | 16) (iv) | 17) (v)  | 18) (iv)  |  |
| 19) (v)        | 20) (i)   | 21) (v)   | 22) (i)  | 23) (v)  | 24) (iii) |  |
| 25) (iv)       | 26) (v)   | 27) (i)   | 28) (i)  | 29) (iv) | 30) (iii) |  |
| 31) (i)        | 32) (iii) | 33) (iii) | 34) (ii) | 35) (v)  | 36) (ii)  |  |
| 37) (iv)       | 38) (v)   |           |          |          |           |  |

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