NAME:_____

1. In isosceles trapezoid *JKLM*, leg $JK = 7x - 9$, base $KL = 5x + 3$, and leg $LM = 2x + 2$. Find the value of *x*.

   [A] 6 [B] $\frac{11}{5}$ [C] $-\frac{1}{3}$ [D] $-\frac{7}{5}$

2. In isosceles trapezoid *JKLM*, leg $JK = 5x - 10$, base $KL = 6x + 2$, and leg $LM = 2x + 8$. Find the value of *x*.

   [A] $-\frac{2}{3}$ [B] -12 [C] $\frac{3}{2}$ [D] 6

3. In isosceles trapezoid *JKLM*, leg $JK = 3x + 6$, base $KL = 9x - 3$, and leg $LM = 7x - 9$. Find the value of *x*.

   [A] $\frac{3}{4}$ [B] $\frac{15}{4}$ [C] $\frac{3}{2}$ [D] -3

4. In isosceles trapezoid *JKLM*, leg $JK = 9x + 8$, base $KL = 3x - 5$, and leg $LM = 10x + 6$. Find the value of *x*.

   [A] $-\frac{11}{7}$ [B] $-\frac{13}{6}$ [C] 2 [D] -14

5. In isosceles trapezoid *JKLM*, leg $JK = 6x - 5$, base $KL = 10x - 4$, and leg $LM = 4x + 7$. Find the value of *x*.

   [A] 1 [B] $\frac{11}{6}$ [C] 6 [D] $-\frac{1}{4}$

6. In isosceles trapezoid *JKLM*, leg $JK = 5x + 4$, base $KL = 9x + 8$, and leg $LM = 2x + 6$. Find the value of *x*.

   [A] $\frac{10}{3}$ [B] -1 [C] $-\frac{2}{7}$ [D] $\frac{2}{3}$

7. In isosceles trapezoid *JKLM*, leg $JK = 3x - 9$, base $KL = 8x - 2$, and leg $LM = 7x - 10$. Find the value of *x*.

   [A] $\frac{1}{4}$ [B] $-\frac{7}{5}$ [C] $\frac{19}{4}$ [D] -8

8. In isosceles trapezoid *JKLM*, leg $JK = 8x + 5$, base $KL = 4x + 7$, and leg $LM = 10x + 4$. Find the value of *x*.

   [A] 0 [B] $\frac{1}{2}$ [C] $-\frac{1}{2}$ [D] -1

9. In isosceles trapezoid *JKLM*, leg $JK = 4x - 6$, base $KL = 2x - 3$, and leg $LM = 3x - 4$. Find the value of *x*.

   [A] 1 [B] $\frac{3}{2}$ [C] 2 [D] -10

[1] B

[2] D

[3] B

[4] C

[5] C

[6] D

[7] A

[8] B

[9] C