

No Calculator - 20 Minutes Timed

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**TMT V1 Top 20 Algebra Prep**

1. Multiply  $(x^2 - 5x + 3)(x - 5)$  [\[213\]](#)

2. Find the midpoint given (6,2) & (4,10)  
[\[218\]](#)

3. Solve  $4x^2 - 14x - 8 = 0$  [\[85\]](#)

4. Simplify  $\frac{10}{3} \cdot \frac{4}{5}$  [\[42\]](#)

5. Solve  $(x - 3)^2 = 7$  [\[208\]](#)

6. Solve  $P = 2l + 2w$  for  $w$  [\[205\]](#)

7. Simplify (PEMDAS)  $3(x + 2)^2 + 3$  [\[212\]](#)

8. Simplify  $(2a^3b^4)^2 \cdot 8(a^5b^2)$  [\[206\]](#)

9. Clear fractions, solve  $\frac{2}{3}a + 3 = \frac{1}{5}$  [\[207\]](#)

10. Simplify  $\frac{x^2+2x-35}{x^2-25}$  [\[209\]](#)

11. Given  $f(x) = 2x^2 + 3x - 6$ , find  $f(-1)$

[\[231\]](#)

12. Simplify  $\frac{5x^2y}{10x^6}$  [\[74\]](#)

13. Simplify  $(2x + 5a)^2$  [\[211\]](#)

14. Simplify  $\frac{\frac{3}{4}}{\frac{4}{9}}$  [\[50\]](#)

15. Find the distance between (1,3) & (-2,5)  
[\[217\]](#)

16. Find 3 points on  $f(x) = 2x^2 + x - 4$   
[\[271\]](#)

X	Y

17. Solve. Show 3+ steps of work [\[89\]](#)  
 $2(3x - 2) - (x + 5) = 4x + 7$

18. Simplify  $\frac{-3 \pm \sqrt{27}}{3}$  [\[214\]](#)

19. Simplify  $\frac{2}{3} + 2\frac{4}{5}$  [\[272\]](#)

20. Write an equation using (2,4) & (-4,7)  
[\[210\]](#)