

## A Better Multiple-Choice Math Test: Factoring

**Directions:** For each factoring problem below, factor completely. Then find the factors of your answer in the choices at the bottom of this page and use them in the same order that you see them on the page. For example, if your answer to problem 1.2. was  $(3x+4)(x+7)$ , this corresponds to ACE and CD. Put them in the proper order and answer **1.** CD (shade C and D) and **2.** ACE (shade A, C, and E).

1.2. Factor:  $4x^2 - 8x$

3.4. Factor:  $x^2 - 11x + 30$

5.6. Factor:  $x^2 - 36$

7.8. Factor:  $x^2 - 10x + 25$

9.10. Factor:  $x^2 - 10x + 16$

11.12. Factor:  $2x^2 + 7x - 4$

13.14. Factor:  $x^2 + 81$

15.16. Factor:  $6x^2 + 5x - 4$

17.18. Factor:  $x^3 - 5x^2 + 4x - 20$

19.20. Factor:  $10x^3 + 5x^2$

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**A** 4

**B** 5

**C**  $4x$

**D**  $5x$

**E**  $5x^2$

**AB**  $x+1$

**AC**  $x+2$

**AD**  $x-2$

**AE**  $x+4$

**BC**  $x-5$

**BD**  $x+6$

**BE**  $x-6$

**CD**  $x+7$

**CE**  $x-8$

**DE**  $2x+3$

**ABC**  $2x-1$

**ABD**  $2x+1$

**ABE**  $3x-2$

**ACD**  $3x+2$

**ACE**  $3x+4$

**ADE**  $4x+1$

**BCD**  $6x-1$

**BCE**  $6x+1$

**BDE**  $6x-5$

**CDE** Prime