

**5.3 Trinomials**

Name \_\_\_\_\_

Factor.	
<b>1.</b> $x^2 + 5x + 6$	<b>2.</b> $x^2 + 8x + 15$
<b>3.</b> $x^2 - 5x + 6$	<b>4.</b> $x^2 - 8x + 15$
<b>5.</b> $x^2 - 9x + 14$	<b>6.</b> $x^2 - 7x + 12$
<b>7.</b> $x^2 - 9x + 18$	<b>8.</b> $x^2 - 7x + 10$
<b>9.</b> $x^2 + 3x - 18$	<b>10.</b> $x^2 + 2x - 15$
<b>11.</b> $x^2 + 4x - 10$	<b>12.</b> $x^2 + 7x - 20$
Answers: <b>1.</b> $(x + 2)(x + 3)$ ; <b>3.</b> $(x - 2)(x - 3)$ ; <b>5.</b> $(x - 2)(x - 7)$ ; <b>7.</b> $(x - 3)(x - 6)$ ; <b>9.</b> $(x - 3)(x + 6)$ ; <b>11.</b> prime	

Factor.	
<b>13.</b> $x^2 + 5xy - 6y^2$	<b>14.</b> $x^2 + 7xy - 8y^2$
<b>15.</b> $x^2 - xy - 12y^2$	<b>16.</b> $x^2 + 11xy - 12y^2$
Factor completely.	
<b>17.</b> $3x^2 - 15x + 18$	<b>18.</b> $2x^2 + 4x - 30$
<b>19.</b> $x^2y + 6xy + 8y$	<b>20.</b> $4x^2y - 12xy - 40y$
Answers: <b>13.</b> $(x - y)(x + 6y)$ ; <b>15.</b> $(x + 3y)(x - 4y)$ ; <b>17.</b> $3(x - 2)(x - 3)$ ; <b>19.</b> $y(x + 2)(x + 4)$	

Factor.

**21.**  $3x^2 + 14x + 8$

**22.**  $2x^2 + 7x + 6$

**23.**  $2x^2 - 11x + 12$

**24.**  $3x^2 - 17x + 10$

Answers: **21.**  $(x + 4)(3x + 2)$ ; **23.**  $(x - 4)(2x - 3)$

Factor.

**25.**  $6x^2 - 11x - 10$

**26.**  $8x^2 - 11x + 3$

**27.**  $4x^2 + 5x + 2$

**28.**  $6x^2 - 2x + 5$

Answers: **25.**  $(2x - 5)(3x + 2)$ ; **27.** prime