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| <p>6. a. Distribution Property of Equality</p> <p>b. Subtraction Property of Equality</p> <p>c. Division Property of Equality</p>  | <p>10. Division Property of Equality</p> <p>12. Addition Property of Equality</p>                 |
| <p>8. a. Segment Addition Property</p> <p>b. Substitution Property of Equality</p> <p>c. Distributive Property of Equality</p> <p>d. Addition of Like Terms</p> <p>e. Subtraction Property of Equality</p> <p>f. Division Property of Equality</p> | <p>14. <math>YU = AB</math></p> <p>16. <math>\angle POR</math></p> <p>18. <math>EF + 7</math></p> |

20. Some Examples:

B is the Midpoint of DE, Definition of a Midpoint

AC bisects DE, Definition of a Segment Bisector

DB = BE, Given

$\angle 1$  and  $\angle 2$  are supplementary; definition of a Linear Pair

22. C; if A implies B, and B implies C, then A implies C. Definition of the Transitive Property

24. Given:  $m\angle GFI = 128$

Prove:  $m\angle EFI = 40$

Statements	Reasons
1. $m\angle GFI = 128$	1. Given
$m\angle EFI = 4x$ ; $m\angle GFE = 9x - 2$	
2. $m\angle GFE + m\angle EFI = m\angle GFI$	2. Angle Addition Postulate
3. $9x - 2 + 4x = 128$	3. Substitution Property
4. $13x - 2 = 128$	4. Addition of Like Terms

5.  $13x = 130$

6.  $x = 10$

7.  $4x = 40$

8.  $m \angle EFI = 40$

5. Addition Property of Equality

6. Division Property of Equality

7. Multiplication

8. Substitution