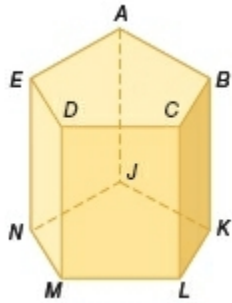


3-1 Parallel Lines and Transversals

Refer to the figure to identify each of the following.



13. all segments parallel to \overline{DM}

ANSWER:

$\overline{CL}, \overline{EN}, \overline{BK}, \overline{AJ}$

14. a plane parallel to plane ACD

ANSWER:

JLM

15. a segment skew to \overline{BC}

ANSWER:

$\overline{EN}, \overline{AJ}, \overline{DM}, \overline{NM}, \overline{NJ}, \overline{JK}$ or \overline{ML}

16. all planes intersecting plane EDM

ANSWER:

DCL, NML, AED, AEN

17. all segments skew to \overline{AE}

ANSWER:

$\overline{KL}, \overline{CL}, \overline{BK}, \overline{ML}, \overline{DM}, \overline{NM}, \overline{KJ}$

18. a segment parallel to \overline{EN}

ANSWER:

$\overline{AJ}, \overline{BK}, \overline{CL},$ or \overline{DM}

19. a segment parallel to \overline{AB} through point J

ANSWER:

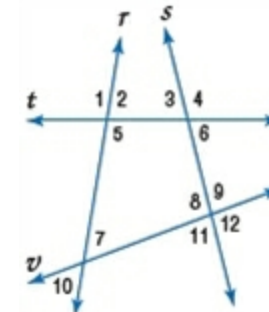
\overline{JK}

20. a segment skew to \overline{CL} through point E

ANSWER:

$\overline{AE}, \overline{ED}$

CCSS PRECISION Identify the transversal connecting each pair of angles. Then classify the relationship between each pair of angles as *alternate interior*, *alternate exterior*, *corresponding*, or *consecutive interior angles*.



21. $\angle 4$ and $\angle 9$

ANSWER:

line s ; corresponding

3-1 Parallel Lines and Transversals

22. $\angle 5$ and $\angle 7$

ANSWER:

line r ; consecutive interior

23. $\angle 3$ and $\angle 5$

ANSWER:

line t ; alternate interior

24. $\angle 10$ and $\angle 11$

ANSWER:

line v ; corresponding

25. $\angle 1$ and $\angle 6$

ANSWER:

line t ; alternate exterior

26. $\angle 6$ and $\angle 8$

ANSWER:

line s ; alternate interior

27. $\angle 2$ and $\angle 3$

ANSWER:

line t ; consecutive interior

28. $\angle 9$ and $\angle 10$

ANSWER:

line v ; alternate exterior

29. $\angle 4$ and $\angle 11$

ANSWER:

line s ; alternate exterior

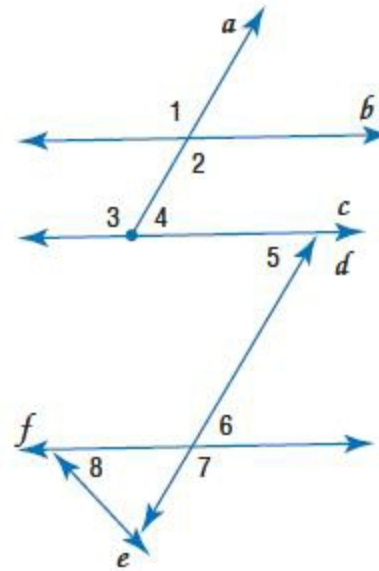
30. $\angle 7$ and $\angle 11$

ANSWER:

line v ; alternate interior

SAFETY Identify the transversal connecting each pair of angles in the photo of a fire escape shown. Then classify the relationship between each pair of angles.

Refer to Page 176.



31. $\angle 1$ and $\angle 2$

ANSWER:

line a ; vertical

3-1 Parallel Lines and Transversals

32. $\angle 2$ and $\angle 4$

ANSWER:

line a ; consecutive interior

33. $\angle 4$ and $\angle 5$

ANSWER:

line c ; alternate interior

34. $\angle 6$ and $\angle 7$

ANSWER:

line d or line f ; linear pair

35. $\angle 7$ and $\angle 8$

ANSWER:

line f ; corresponding

36. $\angle 2$ and $\angle 3$

ANSWER:

line a ; alternate interior