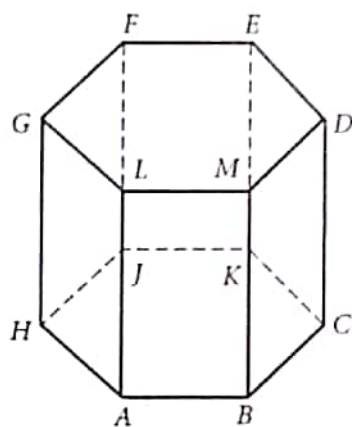## Practice

6.3 *Prisms*

r Exercises 1–7, refer to the regular right hexagonal prism at
ght.

. Name the two bases.

hexagon *LMDEFG* and hexagon *ABCKJH*

. Name all segments congruent to $\overline{BC}$.

$\overline{CK}, \overline{KJ}, \overline{JH}, \overline{HA}, \overline{AB}, \overline{MD}, \overline{DE}, \overline{EF}, \overline{FG}, \overline{GL}, \overline{LM}$

. How are the two bases related?

The regular hexagonal bases are congruent.

. List all the lateral faces.

ABML, BCDM, CDEK, JKEF, HJFG, ALGH

. Name all segments congruent to $\overline{CD}$.

$\overline{BM}, \overline{AL}, \overline{HG}, \overline{JF}, \overline{KE}$

. What type of quadrilateral is *FEKJ*?

FEKJ is a rectangle.

. In what manner are the lateral faces related?

The rectangular lateral faces are congruent.

Exercises 8–12, find the length of the diagonal of a right
ctangular prism with the given dimensions.

. $l = 6, w = 9, h = 12$

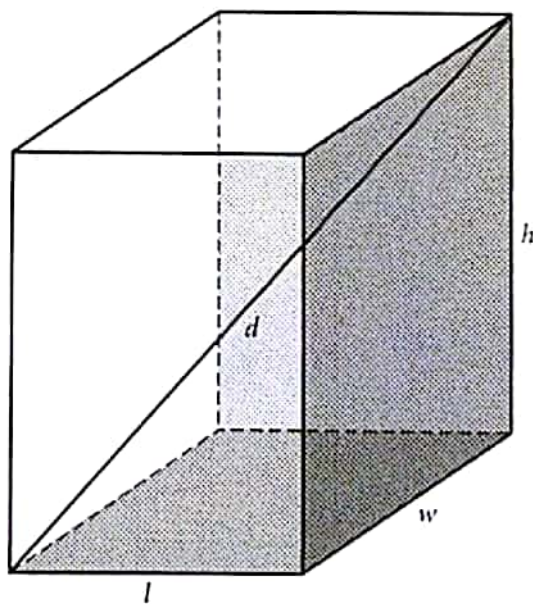$d = 3\sqrt{29}$

. $l = 4, w = 7, h = 2.3$

$d = \sqrt{70.3}$

. $l = a, w = a, h = 2a$

$d = a\sqrt{6}$

. $l = 2a, w = 3a, h = 4a$

$d = a\sqrt{29}$

d the missing dimensions.

. $l = 10$ ft, $w = 6$ ft, $d = 19$ ft, $h =$ 15 ft

. $l = 16$ in, $h = 21$ in, $d = 29$ in, $w =$ 12 in

. $w = 9$ cm, $h = 8$ cm, $d = 17$ cm, $l =$ 12 cm