## Surface Area

You can use formulas to find the surface area of different solid figures.

## Rectangular Prism



7 in.

$$
\begin{aligned}
S A & =2 \ell w+2 \ell h+2 w h \\
& =2(5 \times 7)+2(5 \times 3)+2(7 \times 3) \\
& =70+30+42 \\
& =142
\end{aligned}
$$

The surface area is $142 \mathrm{in}^{2}$.

## Triangular Prism


$S A=2\left(\frac{1}{2} \times 4 \times 3\right)+(3 \times 5)+(4 \times 5)+$ $(5 \times 5)$
$=12+15+20+25$
$=72$
The surface area is $72 \mathrm{ft}^{2}$.

Find the surface area of each figure.
1.

2.


Find the surface area of each rectangular prism.
3. $\ell=5.5 \mathrm{~cm}, w=4.5 \mathrm{~cm}, h=3.5 \mathrm{~cm}$
4. $\ell=15 \mathrm{in} ., w=9 \mathrm{in} ., h=3.8 \mathrm{in}$.
5. $l=2 \mathrm{yd}, w=6 \mathrm{yd}, h=1.7 \mathrm{yd}$
6. Reasoning Write the dimensions of two different rectangular prisms that have the same surface area.
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$\qquad$
$\qquad$

