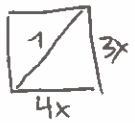
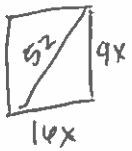
Answer Key

Ratios in the Media Practice

Aspect Ratio	TV Size	Width	Height	Screen Area
4:3 	7 in.	$(4x)^2+(3x)^2=7^2$ $25x^2=49$ $x^2=1.96$ $x=1.4$ $W=4(1.4)=5.6$ in.	$H=3(1.4)=4.2$ in	$A=WH$ $A=(5.6\text{in})(4.2\text{in})$ $A=23.52\text{ in}^2$
4:3	10 in.	8 in.	6 in.	48 in^2
4:3	15 in.	12 in.	9 in.	108 in^2
4:3	19 in.	15.2 in.	11.4 in.	173.3 in^2

Aspect Ratio	TV Size	Width	Height	Screen Area
16:9	24 in.	20.8 in.	11.7 in.	$243.4\ in^2$
16:9	26 in.	22.4 in.	12.6 in.	$282.2\ in^2$
16:9	32 in.	27.2 in.	15.3 in	$416.2\ in^2$
16:9 	52 in.	$(16x)^2+(9x)^2=52^2$ $337x^2=2704$ $x^2\approx 8$ $x\approx 2.8$ $W=16(2.8)=44.8$ in	$H=9(2.8)=25.2$ in	$A=WH$ $A=(44.8\ in)(25.2in)$ $A\approx 1{,}129\ in^2$