Math Facts for the SHSAT

Patterns of Perfect Squares and Square Roots (1 – 25)

1^2	=	$(^-1)^2$	=	**1**	$\sqrt{1}$	=	$1^{\frac{1}{2}}$	=	**±1**	$^-1^2$	=	**$^-$1**	$^-\sqrt{1}$	=	$^-1^{\frac{1}{2}}$	=	**$^-$1**
2^2	=	$(^-2)^2$	=	**4**	$\sqrt{4}$	=	$4^{\frac{1}{2}}$	=	**±2**	$^-2^2$	=	**$^-$4**	$^-\sqrt{4}$	=	$^-4^{\frac{1}{2}}$	=	**$^-$2**
3^2	=	$(^-3)^2$	=	**9**	$\sqrt{9}$	=	$9^{\frac{1}{2}}$	=	**±3**	$^-3^2$	=	**$^-$9**	$^-\sqrt{9}$	=	$^-9^{\frac{1}{2}}$	=	**$^-$3**
4^2	=	$(^-4)^2$	=	**16**	$\sqrt{16}$	=	$16^{\frac{1}{2}}$	=	**±4**	$^-4^2$	=	**$^-$16**	$^-\sqrt{169}$	=	$^-16^{\frac{1}{2}}$	=	**$^-$4**
5^2	=	$(^-5)^2$	=	**25**	$\sqrt{25}$	=	$25^{\frac{1}{2}}$	=	**±5**	$^-5^2$	=	**$^-$25**	$^-\sqrt{25}$	=	$^-25^{\frac{1}{2}}$	=	**$^-$5**
6^2	=	$(^-6)^2$	=	**36**	$\sqrt{36}$	=	$36^{\frac{1}{2}}$	=	**±6**	$^-6^2$	=	**$^-$36**	$^-\sqrt{36}$	=	$^-36^{\frac{1}{2}}$	=	**$^-$6**
7^2	=	$(^-7)^2$	=	**49**	$\sqrt{49}$	=	$49^{\frac{1}{2}}$	=	**±7**	$^-7^2$	=	**$^-$49**	$^-\sqrt{49}$	=	$^-49^{\frac{1}{2}}$	=	**$^-$7**
8^2	=	$(^-8)^2$	=	**64**	$\sqrt{64}$	=	$64^{\frac{1}{2}}$	=	**±8**	$^-8^2$	=	**$^-$64**	$^-\sqrt{64}$	=	$^-64^{\frac{1}{2}}$	=	**$^-$8**
9^2	=	$(^-9)^2$	=	**81**	$\sqrt{81}$	=	$81^{\frac{1}{2}}$	=	**±9**	$^-9^2$	=	**$^-$81**	$^-\sqrt{81}$	=	$^-81^{\frac{1}{2}}$	=	**$^-$9**
10^2	=	$(^-10)^2$	=	**100**	$\sqrt{100}$	=	$100^{\frac{1}{2}}$	=	**±10**	$^-10^2$	=	**$^-$100**	$^-\sqrt{100}$	=	$^-100^{\frac{1}{2}}$	=	**$^-$10**
11^2	=	$(^-11)^2$	=	**121**	$\sqrt{121}$	=	$121^{\frac{1}{2}}$	=	**±11**	$^-11^2$	=	**$^-$121**	$^-\sqrt{121}$	=	$^-121^{\frac{1}{2}}$	=	**$^-$11**
12^2	=	$(^-12)^2$	=	**144**	$\sqrt{144}$	=	$144^{\frac{1}{2}}$	=	**±12**	$^-12^2$	=	**$^-$144**	$^-\sqrt{144}$	=	$^-144^{\frac{1}{2}}$	=	**$^-$12**
13^2	=	$(^-13)^2$	=	**169**	$\sqrt{169}$	=	$169^{\frac{1}{2}}$	=	**±13**	$^-13^2$	=	**$^-$169**	$^-\sqrt{169}$	=	$^-169^{\frac{1}{2}}$	=	**$^-$13**
14^2	=	$(^-14)^2$	=	**196**	$\sqrt{196}$	=	$196^{\frac{1}{2}}$	=	**±14**	$^-14^2$	=	**$^-$196**	$^-\sqrt{196}$	=	$^-196^{\frac{1}{2}}$	=	**$^-$14**
15^2	=	$(^-15)^2$	=	**225**	$\sqrt{225}$	=	$225^{\frac{1}{2}}$	=	**±15**	$^-15^2$	=	**$^-$225**	$^-\sqrt{225}$	=	$^-225^{\frac{1}{2}}$	=	**$^-$15**
16^2	=	$(^-16)^2$	=	**256**	$\sqrt{256}$	=	$256^{\frac{1}{2}}$	=	**±16**	$^-16^2$	=	**$^-$256**	$^-\sqrt{256}$	=	$^-256^{\frac{1}{2}}$	=	**$^-$16**
17^2	=	$(^-17)^2$	=	**289**	$\sqrt{289}$	=	$289^{\frac{1}{2}}$	=	**±17**	$^-17^2$	=	**$^-$289**	$^-\sqrt{289}$	=	$^-289^{\frac{1}{2}}$	=	**$^-$17**
18^2	=	$(^-18)^2$	=	**324**	$\sqrt{324}$	=	$324^{\frac{1}{2}}$	=	**±18**	$^-18^2$	=	**$^-$324**	$^-\sqrt{324}$	=	$^-324^{\frac{1}{2}}$	=	**$^-$18**
19^2	=	$(^-19)^2$	=	**361**	$\sqrt{361}$	=	$361^{\frac{1}{2}}$	=	**±19**	$^-19^2$	=	**$^-$361**	$^-\sqrt{361}$	=	$^-361^{\frac{1}{2}}$	=	**$^-$19**
20^2	=	$(^-20)^2$	=	**400**	$\sqrt{400}$	=	$400^{\frac{1}{2}}$	=	**±20**	$^-20^2$	=	**$^-$400**	$^-\sqrt{400}$	=	$^-400^{\frac{1}{2}}$	=	**$^-$20**
21^2	=	$(^-21)^2$	=	**441**	$\sqrt{441}$	=	$441^{\frac{1}{2}}$	=	**±21**	$^-21^2$	=	**$^-$441**	$^-\sqrt{441}$	=	$^-441^{\frac{1}{2}}$	=	**$^-$21**
22^2	=	$(^-22)^2$	=	**484**	$\sqrt{484}$	=	$484^{\frac{1}{2}}$	=	**±22**	$^-22^2$	=	**$^-$484**	$^-\sqrt{484}$	=	$^-484^{\frac{1}{2}}$	=	**$^-$22**
23^2	=	$(^-23)^2$	=	**529**	$\sqrt{529}$	=	$529^{\frac{1}{2}}$	=	**±23**	$^-23^2$	=	**$^-$529**	$^-\sqrt{529}$	=	$^-529^{\frac{1}{2}}$	=	**$^-$23**
24^2	=	$(^-24)^2$	=	**576**	$\sqrt{576}$	=	$576^{\frac{1}{2}}$	=	**±24**	$^-24^2$	=	**$^-$576**	$^-\sqrt{576}$	=	$^-576^{\frac{1}{2}}$	=	**$^-$24**
25^2	=	$(^-25)^2$	=	**625**	$\sqrt{625}$	=	$625^{\frac{1}{2}}$	=	**±25**	$^-25^2$	=	**$^-$625**	$^-\sqrt{625}$	=	$^-625^{\frac{1}{2}}$	=	**$^-$25**