

6.4 Special Products

303. $q^2 + 24q + 144$

305. $x^2 + \frac{4}{3}x + \frac{1}{16}$

307. $y^2 - 12y + 36$

309. $p^2 - 26p + 169$

311. $16a^2 + 80a + 100$

313. $9z^2 + \frac{6}{5}z + \frac{1}{25}$

315. $4y^2 - 12yz + 9z^2$

317. $\frac{1}{64}x^2 - \frac{1}{36}xy + \frac{1}{81}y^2$

319. $25u^4 + 90u^2 + 81$

321. $64p^6 - 48p^3 + 9$

323. $c^2 - 25$

325. $b^2 - \frac{36}{49}$

327. $64j^2 - 16$

329. $81c^2 - 25$

331. $169 - q^2$

333. $16 - 36y^2$

335. $49w^2 - 100x^2$

337. $p^2 - \frac{16}{25}q^2$

339. $x^2y^2 - 81$

341. $r^2s^2 - \frac{4}{49}$

343. $36m^6 - 16n^{10}$

345. $225m^4 - 64n^8$

347. (a) $4r^2 + 48r + 144$ (b) $9p^2 - 64$ (c) $7a^2 - 48ab - 7b^2$ (d) $k^2 - 12k + 36$

349. (a) $x^{10} - y^{10}$ (b) $m^6 - 16m^3n - 64n^2$ (c) $81p^2 + 144pq + 64q^2$ (d) $r^5 + r^2s^2 - r^3s^3 - s^5$

351. (a) 4,225 (b) 4,225 (c) Answers will vary.

353. Answers will vary.

355. Answers will vary.